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CONTENTS: Vol. LXVII., No. 8 (Series No. 1334.)

PAGE	
American Notes 337	Information Wanted 353
Association Ballads 351	Irish News 331
Australasian News 336	Legal Reports 346
Bankruptcies and Fail-	More Minor Experiences
ures	
Birth 339	Marriages Col. Supp.
	Narriages 559
	New Books 353
Colonial and Foreign	New Companies and
News 338	Company News 347
Commercial Notes 354	Observations and Re-
Consular Counsel 354	flections 341
Corner for Students 328	Olive Oil Adulteration 349
Correspondence 352	Personalities 339
Danish News 333	Poisonings 332
Deaths 339	Reviews 350
Editorial Comments:	Rolling Stones in Phar-
Atomic Evolution 342	macy 359
The Legislative Ses-	Scientific Progress 340
sion 343	Scotch News
The National Revenue 344	South African News 334
Notes 344	Spanish News
English News 328	Trade Notes 340
French News	Trade Report 355
Fungus-Disease of Fruit-	Wand Family 760
trees	Ward Family 360
Gazette Col. Supp.	West-end Pharmacy 348
	Westminster Wisdom 345
India and the East 338	Wills 339

The Chemists' and Druggists' Diary, 1906. Preliminary Notice.

THE preparation of this work has already commenced, and advertisers who wish to avail themselves of the opportunity of making their announcements in the new volume should make sure of getting space by addressing the Publisher of THE CHEMISTS' AND DRUGGISTS' DIARY, 42 Cannon Street, London, E.C.

The DIARY is presented free to all subscribers to THE CHEMIST AND DRUGGIST, and being in daily use by thousands of our readers throughout the year is the most esteemed and valuable advertising-medium of the kind in the world. Remember that with our unique foreign and colonial circulation it is necessary to go to press at an early date, so that the DIARY may be delivered to subscribers abroad before Christmas.

Summary.

The subjoined paragraphs give the gist of the more important matters in this issue, with the object of showing at a glance what has happened during the week. See also "Contents" in the first

An Interesting Note on magnesium sulphate mixture will be found on p. 353.

Women Pharmacists are employed in German pharmacies because they are choap (p. 338).

OUR PARIS CORRESPONDENT gives some impressions of the pharmacies at Nancy on p. 332.

PORTRAITS of six members of the Ward family, all in tho drug-trade, are given on p. 360.

We note the chief points in the Trade-marks Act that is to come in force next April (p. 343).

A CHEMIST gives on p. 359 a very readable account of his business experiences in Baluchistan.

THE result of the recent examination for the certificate of apothecaries' assistant is given on p. 329. A NEW POISONS BILL has been introduced into the New

South Wales Legislative Assembly (p. 336).

YOUNG FRUIT-TREES are liable to several fungus-diseases. One of these is the subject of an article on p. 351.

THE eventful career of Nicolas Lemery, a pharmacist who was born at Rouen in 1645, is described on p. 341.

A CANDIDATE gives his experiences at the recent Minor oxamination at Bloomsbury Square (Col. Supp.).

Mr. Fred. Reynolds suggests an illustration for the next edition of the British Pharmacopæia (p. 340).

THERE are troubles in Copenhagen between the pharmacists and druggists over the sale of medicated cod-liver oil (p. 333).

SOME statistics of the progress of the Shop-hours Act have been collected by the Bradford Central Traders' Association (p. 329).

Dogs are bred for vivisection at Brockwell Hall, but Mr. Akers-Douglas cannot furnish a return of the number of dogs. (p. 345).

MAGISTRATE RUGGLES has given a common-sense judgment in the caso at Middelburg where a chemist prescibed for a child (p. 335).

THE DISPENSER at Launeeston (Tasmania) Dispensary is saving money by using imitations of popular proprietary medicines (p. 336).

SIX Processes of sterilising water are given on p. 348. The methods are to be tried in connection with the Army experiments on sterilisation.

"XRAYSER" calls a decision of a Brooklyn judge on the ownership of prescriptions "luminous nonsense," and most people will agree (p. 341).

ITEMS from seven analysts' reports are given on p. 330, whilst the Cape Analyst's annual report furnishes some interesting material on p. 334.

THE PRESIDENT OF THE BRITISH ASSOCIATION devoted his address to a closely reasoned theory of evolution applied to the inanimate world (p. 342).

A CONTROVERSY has been going on at Nice concerning the adulteration of olive oil. Some revelations are given on p. 349.

THE QUARTERLY REPORT of the Cape Pharmacy Board includes the poisons schedule motion which other South African Pharmacy Boards are to discuss (p. 335).

The use of scientific names for the synthetic chemicals recognised in the United States Pharmacopæia does not meet with favour amongst all classes (p. 337).

PARTICULARS are given on p. 346 of the litigation between two American manufacturers of cotton wool. The decision there recorded is being appealed against.

Have not the Faculty of Physicians and Surgeons of Glasgow the power to license practitioners of pharmacy in Glasgow? is the question a correspondent asks on p. 352.

THE "LANCET" approves of the rules drawn up by the Council of Pharmacy and Chemistry of the American Medical Association with regard to the control of proprietaries (p. 345).

MORPHINE SALTS AND SANTONIN are dearer, as was anticipated. Ergot and cod-liver oil are also higher. Quinine and Japan wax are firmer. Menthol is lower. An auction of first-hand drugs is reported on p. 355. В

Corner for Students.

CONDUCTED BY LEONARD DOBBIN, Ph.D.

Students, please note. All communications should be addressed to the Editor of "The Chemist and Druggist," 42 Cannon Street, London, E.C.

Stereochemistry.

By W. W. TAYLOR, M.A., D.Sc.

Racemisation.

F an optically active substance undergoes a chemical transformation, as a result of which the carbon atom is no longer asymmetric, the activity disappears also. Thus, if d or l lactic acid, CH₃. CHOH.COOH, is reduced to propionic acid, CH₃.CH₂.COOH, the asymmetry is removed, and the resulting acid is inactive. But if the transformation does not destroy the asymmetry, the new substance, as a rule, is optically active, though the amount of activity is usually altered in consequence of the change. In certain cases, however, the activity does disappear, although the asymmetry still remains; for example, if active lactic acid is converted into a bromopropionic acid, CH3. CHBr. COOH, the product is inactive, malic acid gives i bromosuccinic acid, and tartaric acid gives i dibromosuccinic acid.

The cause of this inactivity is that during the reaction one half of the substance has changed into the other modification, the two forming a racemic mixture or compound. This rearrangement occurs most easily in those cases in which the chemical change consists in the replacement of one of the groups directly united to the asymmetric carbon atom by another group.

It is a particular case of a general phenomenon-viz., that each of the stereoisomers more or less readily undergoes a change into the enantiomorph configuration, and, owing to the similarity of the two, equilibrium is attained when there are equal quantities of the two isomers. In the examples given the rearrangement takes place very readily at ordinary temperatures, while in many cases a high temperature is necessary to effect it-e.g., if d or l tartaric acid is heated with a little water, under pressure to 175° C. for thirty hours, an inactive substance is obtained which consists mainly of racemic acid. Boiling an aqueous solution of d tartaric acid for several days only causes racemisation to a small extent. There are many substances which cannot be racemised in this way, decomposition taking place before the necessary temperature is reached. That racemisation is the cause of the loss of activity when a brompropionic acid is made from d lactic acid is shown by the fact that if the temperature is kept low, and the reaction moderated by addition of an indifferent liquid such as chloroform, an optically active product is obtained.

The Relation between Constitution and Amount of Rotation.

As has just been stated, if one of the four groups of C a b c d undergoes chemical change there is usually a change in the degree of activity (rotation)-e.g., the specific rotation of methyl d lactate is -11.1° , and of propyl d lactate is -17.1° . That the rotation depends in some way upon the nature of the groups is evident, but all attempts to formulate the connection between them have proved unsuccessful. Guye's hypothesis sought to express the degree of asymmetry in terms of the masses of the four groups,

$$P = (a-b)(a-c)(a-d)(b-c)(b-d)(c-d),$$

the asymmetry product, P, being the product of the differences of the four groups, and being proportional to the This equation expresses the facts in a great rotation. number of cases.

(1) If two groups become the same, P=0, and the rota-

tion =0; this is the case, for the carbon atom is no longer asymmetric.

(2) If the largest group (a) undergoes change and remains the largest, the rotation is unchanged in sign, but increases in amount, the specific rotation of amyl chloride, bromide, and iodide being +1° 6', +4° 24', and +8° 20' respectively. Similarly, so long as the smallest group (d) remains the smallest, increase or decrease in its mass produces decrease or increase of the rotation, but no change of sign.

(3) If the relative position of the two middle groups (b, c) is changed, the sign of rotation is changed—e.g., if d tartaric acid, CH.OH.COOH.CHOHCOOH, be converted into diacetyltartaric acid,

CH.CH₃COO.COOH.CH(CH₃COO)COOH,

the largest and smallest groups of the one are the largest and smallest groups of the other, but the second smallest group (OH=17) has become the second largest (CH₃COO=59, COOH=45), and the new compound is lævorotatory $= -23^{\circ} 19'$, while the corresponding benzoyl derivative is still more lævorotatory = -117° .

There are, however, many instances in which the hypothesis is not in accord with the facts. If two groups are of equal mass, the rotation should = 0, but many such substances are active—e.g., the aldehyde from d amyl chloride, CH. CH₃. C₂H₅. CHO, is active, though C₂H₅ = CHO = 29.

Many instances are known in which conclusions (2) and

(3) are not borne out by the facts.

It must be concluded that the connection between rotation and constitution of the molecule depends on other factors besides that of the masses of the groups.

Note to Students.—This series of articles will continue until the end of September, when a set of problems and questions will be submitted for reply by students. Prizes will then be awarded for the best papers sent in.—The Editor.

English Rews.

Local newspapers containing marked items of news interesting to the Trade are always welcomed by the Editor.

Brevities.

The Boston Town Council have accepted the tender of Messrs. Gilliatt, Ltd., for the supply of deodorisers—powder at 6s. and fluid at 1s. 1d.

Arthur Devereux, chemist and druggist, found guilty of killing his wife and twin children at Harlesden, was hanged at Pentonville Prison on August 15.

At Chester Castle last week, Albert Sygrove, a young gamekeeper, was fined 40s. and costs or one month's hard labour, for poisoning pheasants with strychnine.

The Board of Trade have replied to the memorial which was addressed to them in March, praying for certain amendments in the Patent Rules 1905, that they see no reason for making any alterations.

Harold Vivian Morris (20), described as a chemist, was, at the County of London Sessions, sentenced to eighteen months' imprisonment for stealing rings and money from two people living in the Sydenham district.

On August 15 the shop of Mr. T. W. Lewis, chemist and druggist, Bridgend Road, Aberkenfig, was entered by burglars, who stole over 10l. in money. Apparently dissatisfied with their haul, they threw a large number of bottles of drugs into the street.

At Daresbury Petty Sessions on August 8 a fourteen-year old girl named Elizabeth Rustage was bound over under the First Offenders Act and ordered to pay costs and value for stealing two bottles of scent from the shop of Mr. Herbert Turton, chemist and druggist, of Stockton Heath.

Joseph Antoine Louis Lobjois (38), a French chemist, was at Marlborough Street Police Court, on August 11, committed for trial charged with the theft and embezzlement of sums amounting to over 1,600%, belonging to his former employer, Dr. Jules Bengué, of Paris, and of Great Titchfield Street, W.

Messrs. Levinstein, Ltd., chemical manufacturers, Manchester, have recently placed on the market a synthetic black dye, under the name of "Thionol black" for dyeing cotton piece-goods, which is intended to supersede logwood black. The discovery is said to be the outcome of researches in the Manchester University.

The sensational charge of poisoning brought against Sophia Ethel Bourne, a servant girl, nineteen years of age, came up for first hearing at Penge on August 10. The evidence was to the effect that the girl confessed to putting a weed-killer powder—a 1-lb. tin of which was kept in the kitchen cup-board—in some stew. Ten persons suffered from symptoms of arsenical poisoning as a consequence.

At Worship Street Police Court on August 15, Thomas William Haddon, proprietor of the London and County Surgical Rubber Co., Goswell Road, answered summonses at the instance of the Chief Commissioner of Police charging him with an offence under the Post Office Act in sending through the post an advertisement of an objectionable nature and an article of a similar character. After hearing the evidence the Magistrate (Mr. Haden Corser) said in his opinion the printed matter and the article did not come within the Act, but it would be a good thing if the question could be raised for the High Court. Costs were refused.

Apothecaries' Assistants' Examination.

The following candidates have been granted the certificate of qualification to act as an assistant to an apothecary in compounding and dispensing medicines: H. M. Anderson, J. E. Barnett, I. Barwell, M. Blair, V. M. Brown, M. Campbell, E. M. Clark, E. H. Curteis, E. G. Ellison, V. M. Fawcett, M. B. Haynes, S. J. Heywood, K. B. Jones, O. K. Lucas, M. I. Marley, D. M. Maynard, N. Millson, D. G. Nicholls, B. Oldrey, J. I. Page, E. A. Philipps, M. Powell, W. E. Raven, E. G. Robinson, C. D. Rogers, E. M. Rollin, D. Scholes, M. C. Schultetus, A. Shacklock, M. L. Smith, C. D. Sturge, C. Thomas, G. M. Thomas, J. E. Thomas, A. J. Tufnell, I. B. Ward, E. Watkinson, A. A. Welby, A. W. Wellington, B. E. Wrigley. of qualification to act as an assistant to an apothecary in

The Shop-hours Act.

The Bradford Central Traders' Association, by addressing a circular to the Town Clerks of the United Kingdom asking for information as to the action taken under the Shop-hours Act, has obtained some returns which are exceptionally informing. Replies have been received from the Town Clerks of seventy-three cities and boroughs, and it is found that in no single case yet has a closing order been got through to a finish. In twenty of these places no steps have been taken either by shopkeepers or local authorities. The remaining fifty-three authorities have received memorials, but in forty-one of these instances not more than three trades have moved in the matter. Twentyfour authorities out of the seventy-three have published draft closing orders, but seventeen of these orders are each for a single trade only. Only one draft closing order (Southport) includes all trades, and in that case exemption from half-day closing is granted to the tradesmen of a central area. In seven cases only has a vote of the petitioning shopkeepers been taken by the municipal authorities, and the result is that two orders have been approved, three have been defeated and abandoned, and two are still undecided.

Experiments with Saceharin.

At the Manchester City Police Court on August 10, before Mr. Edgar Brierley, Assistant Stipendiary, the case of the Inland Revenue Department against John McNichol and Joseph McNichol, manufacturing chemists, of Hanson Court, Manchester, was heard. Defendants were charged with manufacturing saccharin without a licence, and with not having taken out a book as required by the regulations. The defence was that the defendants had been merely experimenting with saccharin, and not for the purposes of trade. One of the defendants' witnesses, Dr. Grossmann, said in his opinion the plant found in Hanson Court was incapable of making saccharin from the raw material. The Stipendiary said he was satis-fied that although the defendants had imported saccharin, they had increased its value by experiments, and therefore were guilty of manufacture without a licence. John McNichot was fined 10l., and 31l. 10s. extra costs. Joseph McNichol was mulcted in costs only. John McNichol was also fined 40s, for not having obtained a book from the Revenue. Λ further charge of concealment of the manufacture with intent to defraud was dismissed. The Stipendiary agreed to state a case.

"A Dead Letter."

Mr. Foot, chicf sanitary inspector of Bethnal Green, E., points out in his annual report that the legal technical difficulties now made possible by what is known as the "warranty defence" are making the working of the Sale of Food and Drugs Acts a dead letter. It seems, he observes, a folly to pass an Act of Parliament professedly to prevent the sale of adulterated food, and then to permit anyone who feels so disposed to contract himself out of it and sell watered milk with the greatest impunity.

Midland Notes.

It is suggested to change the name of "Corporation Street" to "Joseph Priestley Street."

Colonel W. F. Wyley, F.C.S., of Messrs. Wyleys, Ltd., Coventry, commanded the 2nd V.B. Warwickshire Regiment at Minehead Camp last week.

The Warwickshire Artillery Volunteers, who number several well-known pharmacists in their ranks, are at Aber, near Bangor, camping out.

An unusual case is reported from the Black Country. A horse drank some strong alkaline boiler-liquid in mistake for water, and died in great agony.

A Smallheath ex-Army man took "spirits of sorrel" with suicidal intent last week, but by means of an emetic a local police constable averted danger.

The early-closing movement in the Birmingham district hangs fire. The majority, however, are apparently coming to the conclusion that Saturday would be the most suitable day to close.

To those pharmacists who are interested in botany it will be interesting to know that the Amazon water-lily (Victoria regia) at the Botanical Gardens, Edgbaston, is in flower and at its best.

Last week a labourer named Whyle, engaged at the chemical-works of Messrs. Chance & Hunt, Ltd., at Oldbury, slipped into a vat of caustic soda and seriously scalded his foot.

A youth who was suffering from severe toothache used strong language within earshot of a vigilant policeman at Sparkhill this week, and was fined a crown by the Magistrates. It is suggested by a correspondent that camphor chloral would have been found cheaper and more effective.

The Birmingham "Mail," in a recent article on the diamond, told its readers that "science tells us that the gem is nothing more than a compound of silicate of soda and magnesium." This called forth from "Chemicus," in the following issue, the statement that the diamond was proved to consist of pure carbon by Davy in 1814.

Mr. J. F. Liverseege, the Birmingham analyst, has reported to the Health Committee that with regard to milkblended butter there is no published standard, and he is not able, therefore, to say whether samples submitted to him are of the nature, etc., demanded. He found in several samples 30 per cent. of water and nearly 1 per cent. of boric acid.

The Potteries and Newcastle-under-Lyme were deprived of water during the whole of Saturday, August 12, owing to the bursting of a trunk main at Hatton. As hydrogen hydrate plays an important part in pharmacy the local brethren had to purchase this necessary solvent from hawkers, who brought it in barrels from country springs and sold it at remunerative prices.

At Scarborough the other day a working woman went to a house where she had been engaged, and found the lady, who resided alone, suffering from an overdose of laudanum. The woman left her household duties and with a doctor, whom she summoned, devoted herself to the work of saving the other woman's life. After sixteen hours' hard work the poisoned woman recovered, and her female preserver was rewarded with sixpence for her devotion!

Motor-accidents grow apace. Mr. Joseph Davis, chemist and druggist, 39 Summer Lane, Birmingham, was riding his

motor-bicycle near Shrewsbury on August 11, when he had a nasty spill and sustained serious injuries to his head. His son, who was riding an ordinary machine, which was attached to the motor-bicycle by a strap, also came to grief, but apparently escaped with a severe shaking only. Mr. Davis was conveyed to Salop Infirmary and detained in that institution.

Analysts Reports.

The annual report of the public analyst of Greenwich states that during the year the following samples were examined: four of camphorated oil, three of clive oil, four of boric-acid ointment, and three of cod-liver oil. All were

From a return just issued by the Sanitary department of the Manchester Corporation of articles of food pro-cured for analysis during the last thirty years, it appears that the total number of drugs procured was 426, only ten of which were adulterated, and only one person was summoned before the Magistrates, the fine being 5s.

In his annual report Dr. Dudfield, the Medical Officer of Health for Paddington, states that twenty-seven samples of washing-soda were analysed during the year, with the result that nine were found to be adulterated. Six summonses were taken out, the percentage of Glauber's salt in each case being 70, 68, 51, 50, 43, and 42. The case with respect to the last named was dismissed, with 5l. 5s. costs against the Council, and the other five summonses were

The quarterly report of the public analyst for Leicestershire states that thirty-two samples of sweet spirit of nitre were analysed, five of which were adulterated. In each case the deficiency in the drug doubtless arose from either long keeping or bad storage. It is a drug which rapidly deteriorates in quality, and its strength depends upon it being fairly fresh. As the drug is very largely used by the public, the analyst expressed the hope that vendors would in the contract of the con either store much smaller quantities or take more effective measures for preventing deterioration.

The public analyst of Stoke Newington points out in his annual report that the percentage of adulterated drugs in England and Wales for 1903 (the last year for which figures are available) showed a trifling increase (9.6, as against 9.5) Seidlitz-powders conon the preceding twelve months. tinued, he observed, to be adulterated throughout the country to the extent of one-fifth of the samples procured for analysis. In Stoke Newington, however, there was no adulteration in any of the nine samples taken, and which comprised two of magnesia, two of seidlitz powder, two of camphorated oil, one prescription, one of boric acid, and one of mercurial ointment.

In his quarterly report Mr. J. F. Liverseege, F.I.C., Ph.C., analyst for Birmingham, states that four of the samples of camphorated oil examined by him contained 20.8 to 22.1 per cent., another contained 25.4 per cent., being somewhat high. The remaining sample contained only 18.9 per cent., being deficient of 11 per cent. of the proper amount of camphor. The vendor was cautioned by the Health Sub-committee, he stating that the deficiency was due to the olive oil being weighed instead of measured when the sample was made. One sample of tincture of iodine was correctly prepared, but another was too strong. The iodine was 16 per cent. in excess of the proper quantity, and the iodide of potassium was 7 per cent. in excess. The vendor was cautioned.

The public analyst of Battersea in his annual report states that during the past twelve months thirteen samples of camphorated oil, three of cod-liver oil, three of cream of tartar, four of glycerin, four of clive oil, and eleven of arrow-root were examined. One sample of arrowroot was adulterated with 20 per cent. of wheat-flour; the vendor was fined 1l. and 12s. 6d. costs. Seven samples of camphorated oil were faulty; four vendors (one of whose oil was devoid of camphor, another whose oil was 55.7 deficient in camphor, a third whose oil was 18.61 per cent. deficient in camphor, and a fourth whose oil was 10.01 per cent. deficient in campnor, and a fourth whose oil was 11.8 per cent. deficient in camphor's being fined respectively, including costs, 32s. 6d., 32s. 6d., 31. 12s. 6d., and 3l. 2s. 6d. Three other vendors sold camphorated oil (1) containing an cil not having the characters of camphorated cil. (2) 41.3 per cent. deficient in camphor, and (5) 22.82 per cent. deficient in camphor. In the first of these three cases the summons was withdrawn, the analyst's certificate being insufficient; in the second the summons was withdrawn by order of the Health Committee, defendant paying 12s. 6d. costs; and in the third case the summons was dismissed on a warranty defence.

Cricket.

Burgoyne Burbidges' C.C. v. Gramme C.C.—This match at Acton on August 12 produced a splendid struggle, the B.B.'s ultimately losing by 64 to 67.

Idris C.C. v. Park Chapel C.C.—Played at Gospel Oak, when the first named secured an easy victory, the scores being: I., 96; P.C., 36.

The Working of the Midwives Act.

Amelia Hollis, 465 York Road, Wandsworth, and Eliza Keen, 15 Hope Street, Battersea, midwives, were summoned at the South-Western Police-court on August 4, for carrying on their business without obtaining a certificate from the Central Midwives Board. Mr. J. W. Godfrey, prosecuting for the London County Council, reminded the Magistrate that these cases were the first that had been taken under the powers conferred on the Board by the Act of Parliament which came into operation this year. Hollis held a certificate from one of the London hospitals, and had a brass plate affixed to her house, which read, "Amelia Hollis, registered midwife." Keen's position was the same, though she had not the plate. Both sought to obtain the authority of the Board to practise, but in each case the application was refused, the Board writing, "It is contrary to our practice to give reasons for our refusal," when asked by Hollis for an explanation. Mr. De Grey (the Magistrate), after a reference to the Act, remarked that the Board seemed to have absolute discretion. He, however, advised defendants to take advantage of the opportunity the Act gave them to appeal from the decision of the Board to the High Court of Justice. Mrs. Hollis said she could not afford it, adding that she had been in practice in Wandsworth for twenty years. The Magistrate, under the special circumstances of the case, simply required defendants to pay the cost of the proceedhings—a few shillings.
At Lambeth Police Court on August 15, a similar charge

was brought against Elizabeth Griffiths, of Furley Street, Peckham. Defendant told the Magistrate she could not afford the 10s. to take out a certificate from the Central Midwives Board, and she was told that in that case she could not practise. Defendant said she had been a midwife since 1894, and had never lost a mother or a baby. The Magistrate (Mr. Hopkins), in adjourning the further hearing of the case sine die, said he had no doubt the Board would be glad to assist the defendant if her qualifications were satisfactory. He advised her, however, to remove the name-plate from outside her house until she had got a certificate.

The M.O. is Cheapest.

At a meeting of the York Board of Guardians on August 10, a Sub-committee which had been appointed to consider the provision of expensive drugs and medicines for the poor recommended (1) that cod-liver oil and surgical dressings should be supplied by a chemist who should also do the dispensing; or (2) that the Guardians should supply a stock of medicines to be kept by the doctors; or (3) that the medical officers should be allowed 25 per cent. of the total cost of all medicines, cod-liver oil to be provided by the Board. It was estimated that the total cost of the scend or the provided by the Board. the total cost of the second scheme would be 37l. 18s. 6d. per annum, and of the third scheme 29l. The last-named course was adopted.

East Anglian Notes.

Mr. R. M. Ling, chemist, Cromer, has been elected to the Executive Committee of the North Norfolk Unionist and Conservative Association.

Mr. F. E. Buckingham, chemist, Aylsham, was the winner of a tournament held in that town last week in connection with the Tennis Club. There were fourteen competitors.

Saturday, August 12, was Hospital Saturday at Cromer. Over 90l. was collected. Voluntary services were rendered by a little army of collectors, among whom were the two sons of Mr. D. Davison, pharmaceutical chemist.

In common with many other public bodies, the King's Lynn Board of Guardians are considering curtailment of expenses. Mr. R. A. Metcalf, chemist, Norfolk Street, is a member of a small committee appointed to inquire into this matter.

Last week a whole family were poisoned at King's Lynn by eating the inedible fungus Amanita phalloides in mistake for mushrooms. Two deaths have taken place. Dr. Plowright is teaching the Lynn public an object-lesson by exhibiting in the museum specimens of the fungus partaken of with such disastrous results, and points out minutely how it differs from the mushroom.

Stolen Cameras.
The camera-works at Hackney of Messrs. Houghtons, Ltd., were broken into on the night of August 14, and a number of cameras stolen. These include the following:

Quarter-plate Regular Sanderson hand-eamera, No. 7502, fitted with a Goerz lens; No. 1457 on the mount.

Junior Sanderson hand-eamera, quarter-plate, No. 10424, fitted with an Aldis lens (No. 1043) in Unieum shutter.

Quarter-plate Regular Sanderson camera, No. 10722, fitted with a B. & L. lens in Unicum shutter.

If any of these goods are offered for sale to chemists, Messrs. Houghtons should be informed of the fact.

Trade Catalogues in Australia.

The following particulars have been received by the Agent-General for Victoria regarding the duty on advertising-matter forwarded to Australia: Copies of catalogues, price-lists, trade circulars, and such advertising-matter, posted direct to individuals, are charged duty in accordance with the following scale: Weighing up to $3\frac{1}{4}$ oz., $\frac{1}{2}d$.; up to $6\frac{1}{2}$ oz., 1d.; up to 9 oz., $1\frac{1}{2}d$.; up to 12 oz., 2d.; up to $14\frac{1}{2}$ oz., $2\frac{1}{2}d$.; up to 16 oz., 3d. If, however, the duty on any one mail from the same sender does not amount to 1s., no charge is made. This practice, which is uniform throughout the Commonwealth, is based on a concession made by the Department of Trade and Customs, and is not embodied in Regulations.

Not a Vegetable.

At Woolwich Police Court on August 15, Paul Bost (45), a travelling purveyor of pills and plasters, was charged, before Mr. Baggallay, with acting as a pedlar without a before Mr. Baggallay, with acting as a pedlar without a certificate. The defendant, whose wares were displayed before the Magistrate in a large tin box, said he had been told at a police court "near Clapham Junction" that he did not require a certificate. His goods were perishable. Mr. Baggallay inspected a box of the pills, and then, referring to the Act, said the only exceptions were "vegetables, fruit, fish, and victuals." The defendant said his pills would come under the first head. They were made largely from gentian, which was a vegetable. Mr. Baggallay: The Act must stop somewhere, and used in Baggallay: The Act must stop somewhere, and used in conjunction with fruit, fish, and victuals, I don't think the term here includes pills. You might as well say that "fish" includes pearls. A fine of 5s. was imposed.

Irish Mews.

Local newspapers containing marked items of news interesting to the Trade are always welcomed by the Editor.

Dispenser or Doctor.

Mr. M. S. Philson has resigned the dispensership of Tyrone and Fermanagh Asylum, Omagh. A proposal to appoint a successor came before the Board of Management on August 11, and an amendment was moved that an assistant medical officer be appointed instead. The amendment was lost, and it was then moved that Mr. McAdam, chemist, Omagh, be appointed; but eventually it was decided to advertise for a dispenser.

Getting Urgent.

Mr. J. Fitzgerald, solicitor, Sligo, has written to the Cavan Board of Guardians stating that Mr. P. N. White, chemist, Sligo, has given him positive instructions to proceed against the Board for the sum of 81. being a balance of account due by the Union. Not wishing to put the Board to unnecessary expense for such a small matter, he wrote to give the Guardians an opportunity of arranging the matter amicably. The caretaker of the dispensaries said he returned all the empties he could, but he still found several of Mr. Whits's bettle full of the still found several of Mr. White's bottles full of medicine. It was decided to communicate with Mr. White's solicitor as to his claim against each dispensary.

Analysts' Expenses.

At Donegal County Council on August 14, Mr. M. Maguire, referring to an account from Professor Barklie, analyst, Belfast, for analysis of samples, said that when convictions were obtained under the Food and Drugs Acts in the county the Magistrates rarely allowed the expenses of the analyst's certificate and the cost fell on the county. He thought the Council should pass a resolution instructing the prosecutors to apply in all such cases for the costs of the analysis. The Secretary of the Council stated that in a recent conviction the Justices refused to allow Professor Barklie his expenses from Belfast. He had had to attend, as defendant's solicitor objected to his certificate as evidence. Professor Barklie after the conviction applied for his travelling expenses against defendant, explaining that he was a county official. The Magistrates refused, and the Council had accordingly to pay a bill for 71. 12s. If the Magistrates decided to make the county ratepayers bear the cost of the analyst's attendance in order to correct a shopkeeper then the sooner these necessary prosecutions were dropped the better. Finally it was resolved that the inspectors be instructed to apply for all such expenses in future, the resolution to be sent to the chief police-officer and the petty sessions clerks.

Scotch Mews.

Local newspapers containing marked items of news interesting to the Trade are always welcomed by the Editor.

Edinburgh Chemists', Assistants', and Apprentices' Association.

At a meeting of the General Committee of the Association held at 36 York Place on August 14, Mr. Ernest Osmond Rowland, 117 Princes Street, Edinburgh, was appointed Interim-Secretary, in room of Mr. David Aitkin Young, who has accepted an appointment in London; and Mr. David Murray was appointed Interim-Treasurer, in room of Mr. Herbert Riley Nightingale, who has accepted an appointment in Newcastle-on-Tyne.

Dundee Items.

There has been a brisk demand for 1d, boxes of "Zambuk" since the distribution of 1-dr. sample tins.

A child, three years old, living in Polepark Road, swallowed twenty pills on Monday last and was removed to the infirmary in a dangerous condition.

The Secretary of University College, Dundee, is now Mr. W. Arnot Watterston. Mr. R. N. Kerr, the former Secretary, has been appointed Librarian. Intending students, please note.

Pharma-drapery.

A large "emporium" of drapery in Edinburgh advertiscs in the local newspapers its willingness to forward to its clients on holiday everything besides drapery that they require. The conclusion of one seductive paragraph is-

. and favour us with instructions about Prescriptions from your Chemist in the letter you are writing concerning Window Curtains, Extra Bedding, Crockery, Cutlery, etc. This induces the sorrowful reflection from a Narthern sub-

scriber, "What about the poor country or seaside chemist?"

Glasgow Notes.

Business is in the backwater which follows the holiday season. The West-end is still a wilderness, and the other parts of the city are lying fallow.

Glasgow pharmacists now go far afield and afloat for their well-earned holidays. Paris is in comparative propinquity to the Cross chimes, but it is a far cry to the South of Spain, Morocco, and the Levant, which were included in the recent itinerary of a South-side Ulysses.

Among the many curious suggestions that are being offered as to the uses to which Glasgow's new Highland park at Loch Goil should be put, not the least peculiar is that it should be reserved for botanists, whose duty it shall be to transplant thither and preserve species of plants, such as Osmunda regalis, which are in danger of extinction in their present stations.

At the last meeting of the Andersonian Naturalists' Society the exhibits included specimens of garden-flowers from Wanlockhead and Leadhills, of special interest because of the altitude at which they were grown (1,300 feet); and Mr. T. S. Barrie, Ph.C., submitted a fruit of *Mucuna* pruriens showing the internal lining of hairs which constitute the cowhage or cow-itch of commerce.

The Town Council of Clydebank, which is practically a suburb of Glasgow, have approved of the action of the police in insisting on grocers, greengrocers, and druggists, and all who sell aerated waters within the burgh, closing at ten o'clock. It may be recalled that a few months ago Partick was only saved from a similar vexatious restriction by the timely opposition of the chemists there, headed by Mr. Currie.

The process for enforcing the Shop-hours Act has reached the penultimate stage. According to the result of the plébiscite, just announced, the voting in various trades varied from 4 to 1 to 10 to 1 in favour of the adoption of the Act. The trades adopting the Act by which chemists are likely to be affected are very few, the most important being grocers, photographic dealers, opticians, and truss and bandage dealers. The legal question as to whether a majority of two-thirds of those actually voting is to be taken as two-thirds of the shopkeepers in a given trade, within the meaning of the Act, is likely to be the subject of litigation at the instance of the opponents of the measure.

The Meek's Poisonings.

THREE of the fourteen fatalities from poisons that have A taken place during the week were misadventures. Ethel Mary Holme, wife of a Ripley doctor, had got into the habit of inhaling chloroform for neuralgic pains. She inhaled too much one night, and was suffocated among the bedclothes. A victim of the chlorodyne-habit, a Clapham horsekeeper, named Saunders, inadvertently took an over-dose and died last week. The third misadventure took place at a Volunteer camp at Altcar. Harry Bell, an apprentice engineer, belonging to Hull, was camping out, and one night, in order to relieve toothache, he used an "oily preparation of camphor," which he appears to have swallowed. He died subsequently in Bootle Hospital.— Mary Whittaker, an Ashton widow, poisoned herself with laudanum.-Harry Venn Hunter, a grocer's assistant at Sevenoaks, drank a mixture of 1 oz. of laudanum and the contents of a bottle of chlorodyne. The laudanum was obtained from Mr. A. E. Sawyer, qualified assistant to Mr. E. Pain, pharmaceutical chemist, Sevenoaks, deceased saying that it was for external use.—Potassium cyanide was taken by Joseph William Holbrook, a Lambeth jeweller.—Carbolic acid caused the deaths of James Frank, a stoker in the Royal Navy, at Portsmouth, and James Bristow, James a well become Polfset with the Polfset P Bristow Lyons, a well-known Belfast man.—Unknown poisons were taken with suicidal intent by a Charing Cross Street newsvendor, who died in the hospital, and by Henri Muller, of Cricklewood.—The Barnstaple Borough Coroner held an inquest on August 15 on the body of Thomas Davies (34), a chemist's assistant, lately employed at the Barnstaple branch of Boots, Ltd., and a native of Llanelly, South Wales. Mr. W. Davies, Llanelly, said the deceased, his brother, was in business as a chemist himself at one time. Mr. William Bell, manager for Boots, Ltd., at Barnstaple, said deceased was sent from headquarters to fill a vacancy at Barnstaple, where he had only been a week. Witness found him addicted to intemperate habits -so much so that he had to suspend him from his duties by instructions from headquarters. Further evidence showed that Davies was found lying on his bed unconscious on Monday afternoon. On the dressing-table was a bottle labelled "Poison." Dr. A. W. Le Marchand said death was due to prussic-acid poisoning.—The unscheduled poisons used by suicides were ammonia, taken by the wife of a Nelson greengrocer, named Osborne; salt of lemon, which Albert Scott, a Cambridge errand-boy, took before shooting himself with a pistol; and yew-leaves, eaten by William King, a Northampton butcher, who was an immate of St. Andrew's Lunatic Asylum.

french Hews. (From our Paris Correspondent.)

CHEMISTRY FOR SCHOOLBOYS.—I have received a circular from the College Stanislas announcing the creation of a course of applied sciences. It points out that the existing practical schools, though popular and prosperous "have up to the present recruited their pupils in a class which is not exactly that of the College Stanislas," and that they intend to give the same advantage "added to the guarantees of religious education, morality, good manners, and discipline which a Christian college assures." The classes begin in October next. Physics, electricity, and chemistry are the three main subjects. The fact that the French better-class schools are waking up to the necessity of including chemistry, etc., as a branch of regular schoolboy education is the interesting point.

Medicinal Wines.—The vintage season will soon be upon us, and the vinegrowers are discussing the weather and the crops, and the newspapers follow suit. Some curious anecdotes are told regarding the tendency of grapes to draw odour and taste from neighbouring plants. Abbé Rozier said that wines produced around Paris have the flavour of the marigolds, which so often grow among the vines, while the taste of the aristolochia (birth-wort) spoils certain Southern wines. The Medoc vinegrowers industriously weed out the snapweed, the blackberry, and the verveine for the same reason; and readers of the classics will remember Pliny's tale of the wines of the isle of Thasos, where hellebore and scammony grew in the vineyards, and winedrinking women were rarely blessed with large families in

consequence.

A New Science.—Dr. Galippe submitted to the Paris Academy of Medicine recently a proposition for the systematic study of heredity on a new basis. The idea is to collect and compare authentic portraits of royalties and ancient families and to study them from a purely pathological standpoint. Many reigning houses present very marked traits—the Halsbourgs, of Austria, for example. The "King of Rome" (Rostand's "Aiglon") far more resembled his Halsbourg mother than his Bonaparte father. Louis XVII. in his childish portraits shows strongly accentuated Halsbourg traits, and the fact that these do not appear in the visage of Naundorff would tend to discredit his claim. Don John of Austria was the only child of Charles V. who did not present the Austrian type of face, and this pathologic evidence would suggest that no royal blood really flowed in the veins of the handsome and heroic victor of Lepanto.

"Modern Style" Architecture ("New Art" is, I believe, the English term) is very popular just now in the capital of French Lorraine, and, of course, at Nancy pharmacy is thoroughly up to date. During a recent visit there the best specimens I saw of an officine in this style was the "Pharmacie Jeanne d'Arc." The Maid of Orleans was conspicuous by her absence, and the shop is merely so named because it happens to stand at the corner of the street named after "la Vierge Lorraine." But there is no doubt about the modern style: the handsome oak fittings and the stone façade are alike treated in those vague and flowing curves which remind one of Rodin's dreamy and unfinished masterpieces. But I could distinguish the serpent and cup emblematical of pharmacy over the door, and various medical plants were outlined in every odd corner; and the toutensemble was less offensively obtrusive than in certain ultramodern pharmacies one might cite in Paris.

modern pharmacies one might cite in Paris.

The "Central Point."—The average Lorraine pharmacy is usually a small, strictly sober, and very professional-looking establishment, but in a large town like Nancy one naturally finds more variety. A characteristic of some of these Eastern towns, since the general popularisation of the trolley-tramway system, is the "Point Central" or tramway junction, usually the centre of the business and shopping portion of the city. The French pharmacists' commercial capacity has often been questioned, but he has at least a keen eye for an eligible shop-site, and at the Point Central, as at the market-place, one usually finds a big flourishing pharmacy of the modern type. The one at Nancy is called the "Pharmacie Normale," and deals (as this class of pharmacies usually do) in what the French call "droguerie et

herboristerie." Chemicals, bandages, etc., catskins and toothache-powders, and other odds and ends appear in the window, outside which there are always a dozen people waiting for the tramcars.

ONE Man, ONE Pharmacy is the principle of French pharmaceutical legislation, and the pharmacy must be the pharmacist's own property. A qualified pharmacist established at Nice, took a manager, also a qualified man. The latter proved satisfactory in every way, and the proprietor finished by leaving him in entire charge of the pharmacy, giving him the right to engage and discharge employés, the complete control of the books and cash, and the "technical direction" of the officine. The manager, in short, "lent" the proprietor 40,000f. (1,600l.), and in consideration of this sum "ran" the pharmacy practically on his own account without supervision of any kind by the man whose name appeared on the door, and who was still legally proprietor of the business. Things went on smoothly in this way for a time until a dispute arose between the two on a matter in which their interests clashed, and a lawsuit resulted. In giving judgment, the Court declared such a contract null and void, and simply instructed that the sum of 40,000f., with interest, should be reimbursed to the manager, no indemnity being due on either side.

Danish Mews.

A FIXED PRICE.—At the last meeting of the Copenhagen Chemists' Association a resolution was passed urging that any chemist who sold drugs or chemists' goods below the usual fixed price should be fined 100 to 500 kr.

Over-Production.—Owing to the large number of young men who enter pharmacy in Denmark, many have to seek employment in foreign countries after having passed the examination. At present about fifty Danish pharmacists are in situations in Switzerland.

An Exception.—Owing to a complaint from the inhabitants in Harderup, a small town, the Minister of Justice has been obliged to remove the chemist who held his post under the Government privilege on account of the great disorder in which his pharmacy was always kept. This, it is stated, was chiefly due to the pharmacist's intemperate habits. Happily this is almost a unique reason for depriving a chemist of his pharmacy.

THE FIRST PATENT MEDICINE.—A preparation of a syrup of carrots has been put on the market under the authority of letters-patent. It is of interest as being the first patent medicine sold in this country. It has been a matter of surprise to chemists that a patent has been granted for this syrup, as it is an old and well-known preparation, and it is only in the manner of preparing it that the difference lies—it being sterilised bacteriologically for preservation purposes. Of course, syrup of carrots prepared in the ordinary way can be sold without infringing the right of this patent, as according to law no medicine can be patented in Denmark.

THE ANNUAL MEETING of the Danish Chemists' Association was held at Copenhagen last month, with the President, Mr. Alfred Benson, in the chair. In his address Mr. Benson alluded to the sale of cod-liver oil with phosphorus, saying that the Government had not yet granted permission to chemists to sell that preparation without a prescription. He also pointed out that the President of the Association of Unlicensed Druggists (Materialister) had recently advised his colleagues to sell that preparation, in spite of the fact that they had been refused permission by the Government. Certain chemists had brought the fact to the notice of the authorities that the unlicensed druggists were selling preparations which, according to law, they had no right to do. The authorities prosecuted a few offenders, and in the first Court the case went against the druggists, but on appeal to the higher Court this decision was reversed. President Benson advised his colleagues to be cautious about accusing the unlicensed druggist of any illegal acts before bringing the matter to the notice of the Committee of the Chemists Association, as the result of a case such as he had mentioned only strengthened the hands of the unlicensed druggists. The President urged the chemists of Denmark to show a more business-like spirit in conducting their affairs, and that they should compete with unlicensed druggists in all the goods they sold.

In Sunny Spain.

A New Building.—The Spanish Budget Estimates for 1906 (Seventh Section: Public Instruction and Fine Arts) provide a sum of 500,000 pesetas (say about 14,000%), for the construction of a new building for the Faculties of Pharmacy and of Sciences of the Central University, Madrid. The site proposed is in the Botanical Gardens, opposite the Retiro (the Hyde Park of Madrid), and near the Calle Claudio Moyano. It remains to be seen whether the sum necessary for this scheme (drawn up by Dr. Cortezo) will be voted by the Cortès.

A "SWEET GIRL GRADUATE."—The Madrid Faculty of Pharmacy has just conferred the degree of licentiate—the certificate corresponding to the English "Minor," and entitling the holder to "keep open shop"—on Señorita Doña Elvira Moragas y Cantarero. It is now some four years since the lady in question took her "Bachelor" certificate with the mention "excellent," and it is said she contemplates taking up pharmacy seriously. As her father is the well-known pharmacist sub delegado, Don Ricardo Moragas, this should not be a difficult matter.

At the Madrid Faculty of Pharmacy the professorial staff has seen several changes within the last few years. Professor Garagarza, the Dean, died recently, and the Chair of Technical Physics and Analytical Chemistry thus left vacant was filled last March by the appointment of Don José Cesares Gil. The new professor comes from the Barcelona University. The Dean of the University is now D. Gabriel de la Puerta, who still occupies the Chair of Inorganic Chemistry. D. Marcelo Rivas Mateos has succeeded the late D. German Cerezo as Professor of Mineralogy and Zoology. The appointment of a hon-pharmacist as Auxiliary Professor of Microbiology, Bacteriology, and Serum Preparations, provoked some little feeling in pharmaceutical circles, and the Dean of the Faculty (Señor de la Puerta) entered a formal profest against his nomination at a meeting of the Council of Higher Education.

ILLEGAL EXERCISE OF PHARMACY.—The profession in Spain, as elsewhere, suffers largely from "intrusos" of different kinds, and prosecutions are occasionally instituted. But Spanish Courts, like all others, are apt to let off offenders lightly. At Barcelona recently a number of convictions were obtained for the illegal sale of medicaments. The culprits, most of whom got off with a forty-shilling fine, ranged from an M.D. and an unfrocked pricst to a "moro de las bofetadas," rejoicing in the truly Oriental name of Muley Aly. But Señor Codina Langlin (who represented Spain at the Brussels International Conference for the Unification of Heroic Remedies) is not weary of well-doing. He recently discovered in a soi-disant herbalist's a veritable pharmacy of some 150 medicaments, not only articles like vaseline, lanoline, etc., but opium and ipecac, chloroform and pepsin, aconite and asafetida, tincture of belladonna, etc. The news of Señor Langlin's recent indisposition has been a source of regret to his numerous friends, but must have been a veritable relief to the "intrusos" in question.

Pharmaceutical Advertisements disguised as newspaper articles ("communicated" to English and American papers, and skilfully sandwiched as "news" in Parisian and other journals) are familiar to most of us. But "El Liberal," the leading daily of Madrid, recently published anamusing tale in which advertisements took a collective and wholesale form novel to the unsophisticated Anglo-Saxon. Some twenty to thirty firms, one after another, were mentioned in this amusing sketch of a provincial family's visit to the capital. Don Isidro is tortured with blighted affections and stomachical troubles, but Dona Dulcinea doses him daily with Herranz's bicarbonated alkaline waters in hygienic syphons, and he becomes a new man. Don Cicero falls from a bridge and breaks his ankle. "Put me in a cab," he has just strength to gasp, "and drive me to Alonsos, the orthopædist's, 104 Fuencarral." And in two months the foot is well and he arrives at a wedding feast just in time to see the faithless Dona Dulcinea drinking Herranz's seltzer again and meditating marriage with her cousin in the fifth degree "contrary to all civil, military, and ecclesiastical law." Naturally tailors and dressmakers, jobmasters, and wedding-cake makers figure in the tale.

South African Mews.

(From our own Correspondents.)

Note .- "The Chemist and Druggist" is regularly supplied by order to all the members of all the Pharmaceutical Societies in British South Africa, viz.:

> South African Pharmaceutical Association. Pharmaceutical Society of Cape Colony. Natal Pharmaceutical Society. Transvaal Pharmaceutical Society. Rhodesia Pharmaceutical Society. Northern District Chemists' Association. Pharmaceutical Society of Orange River Colony.

Cape Colony.

DRUG AND CHEMICAL IMPORTS.—During the five months ending May 31, Cape Colony imported drugs and chemicals valued at 102,000l., compared with 110,000l. during the corresponding period of 1904.

A NEW CUSTOMS BUREAU.—A new Bureau to deal with Customs statistics is to be established in South Africa, the central office of which will be in Cape Town. The main principles of the scheme were agreed upon at a Conference of Customs officials held recently at Bloemfontein.

STRYCHNINE IN MEDICINE.—Further evidence was given on July 19 in the Magistrate's Court at Port Elizabeth in the charge of culpable homicide against a chemist's assistant, named Charles Richards, the allegation being that a prescription for an infant was wrongly made up, causing death.

The parents of the child narrated the procuring and administration of the medicine, death ensuing soon after. The father said he knew the accused favourably and well, but had the bitterest hatred against another assistant, who has died since these proceedings were started. A further remand was granted.

CAPE ANALYTICAL WORK.—The annual report of the senior analyst for the Cape of Good Hope, Mr. C. F. Juritz, is usually interesting reading, and the last one received is no exception. The number of analyses made shows an annual increase, and drugs and chemicals show a large proportion of the articles examined. During the first half of 1904 there were examined, amongst other things, 13 samples of castor oil, 10 of iron pills, 9 of cream of tartar, 8 of strychnine, 4 of soda-water, 2 each of curry-powder, fruitwine, cinnamon, honey, rhubarb powder, herbs, tartaric acid, "medicine," and sheep-dip, and 1 each of turmeric, with distribute presents sills, salt of lower suphyrical properties. methyl dinatrium arsenate, pills, salt of lemon, sulphuric acid, digestive syrup, glycerin, spirit of nitrous ether, Gregory's powder, saffron, fever-mixture, sodium carbonate, and ammonium chloride. Eight of the cream-of-tartar samples were found to be adulterated as follows:

Sample No.	Potassium Bitartrate per cent.	Calcium Sulphate per cent.	Calcium Tartrate per cent.	Lead, gr. per lb.	Arsenic, gr. per lb.
1 2 3 4 5 6 7 8	95 94 94 95 94 96 94 88.5	 5.20 8.13	 5.20	1 1 1 1 1 2 1 1 1 1 1 1 1 1	\$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$

In commenting on these results Mr. Juritz tabulates from The Chemist and Druggist records the convictions that had taken place up to that date for the sale of cream of tartar containing lead and arsenic. Of the nine samples of iron pills examined two contained the exact amount (0.8 of a grain) of ferrous carbonate prescribed by the British Pharmacopæia, four contained more than the requisite quantity (from 0.9 to 1.1 grain), while three were deficient to the extent of from 45 to 58 per cent. It is mentioned that samples of Oppenheimer's bipalatinoids were also examined; the capsules contained powdered sodium carbonate and ferrous sulphate, the available weight of the latter being 1 grain. In this respect, therefore, comments Mr. Juritz, the palatinoids are equal to Blaud's pills. A sample of honey detained on import by the Collector of Customs at Port Elizabeth was found to be a mixture of the natural product with an artificial pre-

paration of invert sugar, the delusion being completed by the insertion of a neatly-cut block of genuine honeycomb into the jar containing the mixture. Samples of malt, digestive syrup, and caramel were analysed, and found free from arsenic. One sample of tartaric acid was found to contain 500 of a grain of arsenic per lb.

As showing the field for chemical and physiological research open in South Africa, Mr. Juritz reports on seven plants used in the brewing of intoxicating Kaffir drinks which were submitted to him from various sources. They were:

A plant known as "Mula," Lineum capense, Thbg. Nat. Ord. Phytolaccaceæ: said to be an acrid poison, but not very active.

"Kiri Moor" or "Moola," Mesemebrianthemum Stella-

tum, Mill.

"Umkwenkwe," Pittosporum viridiflorum, Sims: used
as a remedy for blackgall sickness.

"Moerbush," Anacampseros ustulata, E. Mey. Ord.

Portulacaceæ.

"Moer" (yeast), prepared from the preceding: evidently the precipitate from the fermentation of the "Mocrbush," kept in order to start fermentation in a fresh brew.

"i Gwele" or "Mula (strong)," Anacampseros ustulata,

E. Mey.
"i Gwele" or "Mula (weak)," unrecognisable.

There is no available information regarding the chemical constituents and physiological action of these plants. Only constituents and physiological action of these plants. Only two sheep-dips were analysed during the half-year, one "Laidlaw's Concentrated Tobacco-powder Dip" (found to contain 2.04 per cent. of nicotine), and the other "Bailey's Sheep-dip," yielding 43.4 per cent. of sulphur, 6.67 per cent. of arsenious sulphide, and 30 per cent. of arsenic, with a small quantity of phenol. The greater portion of the agricultural analyses were of soils. At the Congress of the Wild Animals Poisoning Club, held at Uitenhage in December, 1903, it was complained that the strychnine supplied by Government for the destruction of wild animals was inefficient. Six samples of the strychnine were accordingly efficient. Six samples of the strychnine were accordingly analysed, and proved to be absolutely genuine. The toxicological and chemico-legal analyses, seventeen in all, showed that in three instances strychnine was used in attempts to poison, and in two of these cases the would-be poisoners obtained the poison from bottles supplied by Government to farmers for the destruction of wild animals. Other poisons discovered were oxalic acid, sulphuric acid, and zinc. Two horses were poisoned at Wellington by eating Ornithogalum thyrsoides in forage. No chemical investigation has yet been made of what is apparently a poison new to science, but the Veterinary Department has investigated the physiological action of the plant, and found that it is poisonous. Certain roots which could not be identified caused the death of a native at Herschel. Chemical investigation revealed no alkaloids or glucosides, the toxic principle being apparently a resin. A "Kaffir doctor" at King William's Town administered a decoction of certain roots to a native girl, and she died. The plant was identified as a polygonumshe died. The plant was identified as a polygonum—probably Polygonum tomentosum var. glabrum—and from it an acrid resin was extracted by means of alcohol, which gave with strong sulphuric acid a bright pink to cherry-red colour, gradually changing through a deep lake to a dirty brown, and finally fading to a greenish tint. Doses of extract from the powdered plant killed three mice, but a quantity of infusion equal to 8 grains of the powdered plant had no effect on a dog. The total expenditure on chemicals had no effect on a dog. The total expenditure on chemicals and apparatus in the laboratories at Cape Town and at Grahamstown during the six months was 669l. 16s. 10d.—not by any means an exorbitant sum for the quality and quantity of work done by Mr. Juritz and his coadjutors.

PHARMACY BOARD MEETING.—The usual quarterly meeting was held at the Colonial Office, Maritzburg, on July 13. The Secretary reported that three candidates had presented themselves for examination, and that two had failed. The successful candidate was Mr. George Elliott, of Greytown.

Personal.—Mr. G. A. Champion, President of the Natal Pharmacy Board, is a retiring member of the Durban Town Council, and is now offering himself for re-election. There are two other candidates in the field, so Mr. Champion will have to work hard in order to secure his return.

LANCASTRIANS IN NATAL.—The wedding of Mr. William Cook, chemist and druggist, of Messrs. Turner & Co., wholesale and retail druggists, Pietermaritzburg, to Miss K. E. Millington, was a pretty affair. Both bride and bridegroom are natives of the Lancashire town of Runcorn, and the groomsman, Mr. W. F. Sadler (also with Messrs. Turner & Co.) belongs to Haslingden, Lancs. The wedding presents, which were numerous and valuable, included a set of silver dinner-ware from the staff of Messrs. Turner & Co.

DURBAN AGRICULTURAL SHOW .- The port of Natal has been en fête this week, for it is Show week. Visitors from all parts of South Africa make a special point of being in Durban at this particular time, for in addition to the Show there are many other attractions. There were very few exhibits in connection with the drugtrade, the only ones which our correspondent could find being the Meridian Drug and Essence Co., Durban; a special exhibit of headache-cachets and powders by Mr. S. K. Elgie, M.P.S. of Durban; the South African Fertilisers Co., and Fison Manure and Fertiliser Co., Ltd. The Meridian Drug and Essence Co. had a neat showcase in the main hall, and among their preparations were concentrated B.P. waters (1 in 10), artificial fruit-essences, eau de cologne, lavender-water, etc. This exhibit gained a silver medal. Mr. S. K. Elgie's showroom was out in the open, amongst the general run of exhibits and stalls. A special sign, "Headaches Cured by 'Crown' Headache wafers," extended an invitation to the visitor to seek a cool corner. Judging by the many inquiries of visitors who were attracted to this stall, Mr. Elgie's enterprise is likely to result in good business. Amongst the special manures at the South African Fertilisers Co.'s stall were fertilisers for improving tobacco, tea, mealies, potatoes, roots, flowers, etc. Samples were also shown of double superphosphate, muriate of potash, basic slag, dissolved bones, high-grade super-phosphates, bone-dust, sulphate of potash, and ammonia, etc. Many farmers and producers of market-gardening goods are now using "Safco," with excellent results.

Transvaal.

SALE OF OPIUM ON THE RAND.—A Mr. A. L. Edwards, writing to the "Rand Daily Mail" from Roodepoort, says the amount of opium sold by the Chinese coolies in that district is assuming large proportions, and that unless a stop is put to it an incentive will be given to riots and disorder. It is notorious, he says, that the Chinese and coolie store-keepers near the mine are chiefly responsible for its sale.

RAILWAY RATES ON SOAP .- On July 25 the administration of the C.S.A. Railway in Johannesburg levelled up rates for Natal manufactured soap to 69d. per hundred pounds, which is the through rate for soap from the coast to Johannesburg. Heretofore, the Natal Railways carried the Natal product at Colonial produce rates of 16d. per hundred pounds as far as Charlestown, whence it was reconsigned to Johannesburg at an intermediate rate of 28d. per hundred pounds, thereby giving the Natal manufactured article the benefit of the difference of 25d. over the raw products and the British article imported for the use of the Transvaal soap-manufacturers.

PRESCRIBING FOR INFLUENZA.—Judgment was given in this case at Middelburg on July 12, by Mr. A. C. Ruggles, A.R.M. It reads as follows :-

W. T. Smit, a child of about fifteen, was ill, and his mother went to accused, Mr. Hood, a qualified chemist, and asked him for some medicine. The accused asked her what medihim for some medicine. The accused asked her what medicine she required, and how old the child was. She told him the age of the child, and that he had influenza. The accused then made up some medicine, and gave it to her with directions as to how it was to be taken. What the accused did was to make up and sell a medicine for a common complaint without having a doctor's prescription, and the question in the case is simply whether this is a contravention of the section. I have looked for authorities, but cannot find any. I don't think thore are any. I would be surprised if there were. To make up a medicine for a common complaint without a prescription from a doctor is not an act specially belonging to the calling of a medical practitioner, and to do so is not to prescribe in the ordinary sense of the word. If the argument for the prosecution is right it would be a criminal offence for any person to recommend a loot drink for another argument for the prosecution is fight it would be a criminal offence for any person to recommend a hot drink for another as a remedy for a cold. To sell the medicine without the prescription cannot be the offence, since the bulk of the recognised business of a chemist is to sell medicinal prescriptions without a prescription, and it would be absurd to say that to recommend a particular medicine for a common complaint is

an act specially bolonging to the calling of a medical practitioner. Every patent modicine stands on that footing. Every big manufacturer and chemist in England, like Allen & Every big manufacturer and chemist in England, like Allen & Hanburys, Savory & Moore, etc., has a host of special preparations—e.g., fluid magnesia, infant powders, Gregory's mixture, otc. In fact, almost every chemist in the world (not mentioning a large number who are not even chemists) has a proscription of his own which he compounds, recommends, and sells for specific complaints. If, then, the accused, on the occasion in question, sold Mrs. Smit a so-called patent medicine prepared by himself by the name of, say, "Hood's influenza mixture," it would be absurd to say he had contravened the law. What difference does it make that he made up one on the spot? . I have only to add that I have nothing to do, in this presecution, with the effect of the medicine on the child. Chemists are no exception to the rule that people are liable for their acts of negligence or carclessness, but that point does not arise in this case; nor have I anything but that point does not arise in this case; nor have I anything to do with the question of the advisability of allowing chemists to thus prescribe. That is a matter for the legislature. I find accused not guilty, and he is discharged.

QUARTERLY REPORT OF THE CAPE PHARMACY BOARD.

REGISTRATION.

During the quarter ending May 31, 1905, the following During the quarter ending May 31, 1905, the following applications for registration as chemists were approved: Ebenezer Bannatyne, Joseph Matthews, Francis Ernest Holborrow, Alexander Pirie, Jehn Lloyd Roberts, William Baxter Murray, John Richard Chippendale, William Eggleston Calvert, Albert Tregelles Fox, Herbert Paget Davies, Gilbert Edgar Truscott, Richard Funnell, Janues Colman Glendinning, Robert Marsden Graham, William Farquhar Milne, Arnold Fitzjohn Brown—all the above hold the British qualification. Andrew Biggan Smith, who holds a certificate of the Colonial Pharmacy Board, was also registered.

RESIGNATION.

Owing to the Secretary, Mr. Rupert J. Gill, having received an appointment which necessitates long absence from Cape Town, he was obliged to tender his resignation to the Board, which was accepted with an expression of regret. Mr. Alfred W. Dockrall, of the Colonial Offico, has been appointed in his place.

RECIPROCITY.

The question of an interchange of certificates issued by the Board with those of the other British South African Colonies has received consideration, and it was decided to await the replies of the various Boards before taking any further action. EXAMINATIONS.

No candidate was successful at the half-yearly examination held in May last. "PATENTS" IN GERMANY.

A letter was received from the Pharmaceutical Society of Cape Colony asking that the Board would do all in its power to prevent the regulations in force in Germany in regard to the sale of patent medicines from becoming law in this Colony.

CHEMISTS AS GENERAL TRADERS.

The question of the right of chemists and druggists to trade as general dealers has occupied the attention of the Board, the Treasury having decided that it is necessary for them to take out licences as such. The Board has very strongly represented the matter to the Government, and is now awaiting the Treasurer's reply, which, it is hoped, will secure for the chemists the full enjoyment of their rights.

THE POISONS SCHEDULE.

The following motion was brought forward at the last general meeting:

That in accordance with Clause 42 of the Medical and Pharmacy Act of 1891, opium and morphine and its salts Pharmacy Act of 1891, opium and morphine and its salts and preparations containing 1 per cent. or more of morphine shall be placed in Division 1 of Schedule 3 of the Medical and Pharmacy Act Amendment Act of 1899; also that acetanilide, cocaine, digitalis and its preparations, mercuric iodide, mercuric sulphocyanide, strophanthus and its preparations, and sulphonal shall be placed in Division 2 of the said schedule opium and morphine shall be separately dealt with; morphine, preparations of, containing not more than 1 per cent. being classed between chloral hydrate and nux vomica; and opium, preparations of, and preparations of poppics remain instead of present reading; also that the words "and its soluble salts" be added after "oxalic acid." twas resolved to obtain the views of all the South African

It was resolved to obtain the views of all the South African Pharmacy Boards, as well as all chemists and druggists registered in Cape Colony, before taking any action in the

Australasian Rews.

Communicated by the Australian Staff of "The Chemist and Druggist."

The fullest information regarding the Australasian drug-trade and pharmacy is given in "The Chemist and Druggist of Australasia," a journal established by the proprietors of this journal, and published in Melbourne, Vic. Copies of the monthly issue can be obtained at 6d. each, post free, from the office of "The Chemist and Druggist," 42 Cannon Street, London, E.C.

Note .- "The Chemist and Druggist" is regularly supplied by order to all the members of the following, among other, societies:

Central Pharmaceutical Association, N.Z. Canterbury (N.Z.) Pharmaceutical Association. Otago Pharmaceutical Association, N.Z. Pharmaceutical Society of New South Wales.
Pharmaceutical Society of Queensland.
Pharmaceutical Society of South Australia.
Pharmaceutical Society of Tasmania. Pharmaceutical Society of Western Australia.

General.

AGRICULTURAL SHOWS.—There are over 200 of these functions yearly in Australasia, and "The Chemist and Druggist of Australasia" makes the suggestion that pharmacists do not, as a rule, take full advantage of the publicity the shows offer. An article is given on the subject in the July number, with some excellent practical suggestions.

New South Wales.

ELLIOTT BROS., LTD., wholesale and manufacturing chemists, Sydney, in order to acquaint their city and suburban clients with their capacity for dealing with anysized orders for practically all pharmaceutical lines, at intervals invite their customers from certain districts to visit the works at Balmain. One such visit came off on June 2, when a large party of pharmacists were shown over the works.

A NEW Poisons Bill was introduced into the New South Wales Legislative Assembly on July 6 by the Chief Secretary. The Act of 1876 was consolidated in 1897, when some of its provisions had been repealed by the Pharmacy Act of that year. In consolidation certain changes were made. The Act was always very imperfect, owing largely to the amendments made during its passage through the House in 1876. In the speech introducing the new Bill the Chief Secretary said that it was intended to repeal the old Poisons Act, re-enacting the necessary provisions with certain others. A notorious poisoning case a few years ago showed that, while the Act forbade the sale of poisons, it did not prevent them being given away without record. This is to be amended. Provision is also to be made to carry out the recommendations of the Birth-Rate Commission with respect to the sale of drugs used for nefarious practices. In compliance with the voting of a referendum of the pharmacists of New South Wales, a small licence fee of 10s. 6d. a year is to be imposed, which will provide ample revenue to carry on the administration of the Act. The members for Maitland and Wickham, both of them miners' constituencies, spoke very briefly, suspicious of anything done by the Pharmacy Board, and looking for an attempt to prevent those who lived far from chemists from getting medicines at a time they required them, because of a monopoly granted to the pharmacist. The Pharmacy Board, a close corporation, one of them said, is not the best adviser of the Government. Some time was promised before the second reading was pushed forward, to allow members to become acquainted with the Bill.

New Zealand.

THE PATENT-MEDICINE REGULATIONS.—In the "Gazette" published on June 29 was a revocation of the regulation's requiring proprietors of patent medicines to deposit the formulæ with the Health Department.

Business Change.—Mr. William C. FitzGerald, chemist, formerly of Wanganui, N.Z., has purchased the pharmacy in Waihi, N.Z., established by Mr. William Robins, pharmaceutical chemist. Mr. FitzGerald has had twenty-five years' experience in the Empire City and in Wanganui as

a pharmaceutical chemist, public vaccinator, and surgeondentist.

Tasmania.

A SUBSTITUTION QUESTION.—At the meeting of the General Committee of the Launceston U.F.S. Dispensary, held on June 30, the dispenser's (Mr. A. Thomson) report showed a saving in the laboratory of 85l. 3s. 5d. for the quarter. As the amount was much larger than usual, one of the delegates (Mr. Beaumont), who is a pharmacist, obtained permission to see the laboratory-book. After perusal, Mr. Beaumont found that among the items being manufactured at the dispensary were nepenthe and pinherion, nepenthe being entered as costing 13s. 3d. to make and 20s. to purchase, pinherion 2s. 3d. to make and 6s. 6d. to purchase. Mr. Beaumont, in pointing out to the members that these were proprietary articles, stated that it was a very serious thing indeed to have the dispenser making these preparations and substituting them for the original drugs; and he stated also that he considered the committee were liable for heavy damages for doing such a thing. He protested against the practice, and trusted the committee would take such steps as would prevent its recurrence. Mr. Guy (another member) was not altogether in favour of proprietaries, and could see no serious harm to the members if the dispenser were capable of making preparations as good as the original. Mr. Wilcox (who has been a storeman at a wholesale firm) stated that he had had some experience of chemists' goods, and gave it as his opinion that all chemists substituted.

Upon the proposal of Mr. Guy, the matter was referred to the Management Committee, with instructions to act at once in the matter.

once in the matter.

On July 7 the Management Committee met re the above. Mr. Beaumont attended by request, and the dispenser was also present. The dispenser stated that there was not the slightest chance of the dispenser being prosecuted for using the word "Nepenthe," as it was a common name and was in use as a medicine years before Ferris' preparation came into the market. It was a word that could not be registered.

Mr. Williams: What about Ferris' advertisement in The CHEMIST AND DRUGGIST, where it states that nepenthe is

protected by registration?

The Dispenser: "You can't believe all you read in the newspapers." He informed the committee that he had Ferris' own formula for making nepenthe, having obtained it from an employé of Ferris'. He considered he had every right to make Nepenthe and dispense it when ordered. If nepenthe-Ferris was ordered he would dispense Ferris' nepenthe.

Mr. Beaumont: "Is it not a fact that you have your own make of nepenthe in Ferris' nepenthe bottle?" After considerable wrangling between the dispenser and the questioner, Mr. Thomson admitted having his own preparation in Ferris' bottle. Mr. Thomson also stated he had the formula for pinherion, and considered himself justified in medicary of the control of t fied in making use of it.

Mr. Beaumont: I see you make syr. ferri chlor. for less than 4d. per lb. Is this dispensed in place of Weld's?

The Dispenser: Not to my knowledge.

The result of the inquiry was that Mr. Thomson has

received instructions to refrain from making any substitution and to dispense exactly what is prescribed.

BARBERS' SHOP RULES .- The following are among the rules which the health officer for Launceston suggests for enforcement in barbers' shops:

The soap used to be in powder or tablet form, so that each person's supply shall be kept separate from any other.
In liou of sponge, separate absorbent wool be used for each

eustomer. If powdered alum or magnesia is used, it must be kept in a dredger.

The use of sponges, powder puffs, magnesia blocks, astringent sticks, corks in bottles is absolutely forbidden.

The antiseptics recommended are solution of cyllin, 1 dr. to a quart; Izal, 1 dr. to a pint; or a solution of Chinosol, strength 1 in 1,200.

A BILL TO AMEND the Poisons Act of Victoria (1890) was introduced into the Legislative Council (Upper House) on July 11.

American Motes.

(From our Correspondent.)

CHANGES IN THE U.S.P.—From the Hygiene Laboratory of the Public Health and Marine Hospital Service of the United States there has been issued a useful "Bulletin" of 122 pages, tabulating the various changes in the new United States Pharmacopæia. The work has been efficiently carried out by Dr. Reid Hunt and Dr. Murray Galt Motter.

The Michigan State Pharmaceutical Association, which will hold its annual meeting late in August, has made arrangements to devote one session as a memorial service to the late Dr. A. B. Prescott. Members of the faculty and conspicuous Michigan pharmacists will read papers at the special service eulogising the various characteristics of the late doctor.

The Anti-Narcotic Crusade in America continues to advance in a gratifying manner. Three druggists and a doctor in Columbus, Ohio, recently pleaded guilty to the charge of violating the anti-cocaine law and were fined \$25 each and costs. Most of the American laws restrict the sale of cocaine to physicians' prescriptions, and this sometimes results in the practice on the part of law-breaking physicians of furnishing prescriptions ad libitum at so much per copy to habitués of the drug. In a number of instances these malefactors have been punished.

A PROCTOR MEMORIAL.—A special committee of the American Pharmaceutical Association is endeavouring to raise a fund for the purpose of erecting a monument to the memory of Professor Proctor, frequently referred to as "the father of American pharmacy." The New York State Pharmaceutical Association recently contributed \$50 to the fund, and it is hoped that other State bodies will take similar action. The committee will be ready to report at the Atlantic City meeting of the A.Ph.A. early in September, and definite arrangements for the erection of the monument will then doubtless be made.

Pennsylvania now has a graduation pre-requisite law, and the Pennsylvania Board of Pharmacy has recently elaborated a list of pharmaceutical schools whose graduater are to be recognised under this statute. There are over eighty schools in America, and the Board has selected the twenty-one who are members of the "American Conference of Pharmaceutical Faculties." The membership requirements of this Association are severe, and they lend themselves admirably to the need for discrimination between schools which will be felt more and more as additional prerequisite laws are enacted in the various States. Thus the pre-requisite movement is destined to have a strong tendency to elevate the standard of pharmaceutical education.

The Lewis and Clark Pharmaceutical Congress, held in connection with the Portland Exposition in Oregon, was somewhat of a fizzle. The distance was so great from every large centre in the United States, and so few pharmacists were visiting the exposition, that a very small audience was present at the sessions. Almost all that was done was to talk about the formation of a "Pacific Coast Pharmaceutical Association," and to pass a long and involved series of resolutions referring to the present status and the future prospects of pharmacy. Professor W. M. Searby, Dean of the California College of Pharmacy, and a well-known pharmacist, was president of the Congress.

A TREASURER'S AFFAIRS.—The American pharmaceutical journals report at considerable length a crisis in the affairs of Mr. John H. Smedley, late secretary and treasurer to Messrs. Parke, Davis & Co., of Detroit. According to the "American Druggist," in order to secure an alleged indebtedness of \$60,000 to Parke, Davis & Co., an attachment has been issued against the residence of Mr. Smedley, whose accounts are being investigated by auditors. As a sequel to the attachment suit a garnishment suit has been started by the company for the sum of \$75,000. The amount claimed by Parke, Davis & Co. in the garnishment suit, \$75,000, is about equal to the amount of stock that Smedley is credited with owning in the last report of the company.

MUCH INTEREST IS FELT in the contemplated opening in Chicago of what is called a "million-dollar drug-store." A rental of \$40,000 a year will be paid, and since a lease has been taken for twenty years this means an obligation amount-

ing to \$800,000. In addition, \$200,000 more will be spent in furnishing and stocking the establishment, thus making a total consideration of a million dollars. It is confidently expected by the proprietors that this will be one of the largest drug-stores in the United States. It is thought that a daily business will be done of about \$1,500, and this will indeed be necessary, since the expenses every day will appropriate \$250. The proprietors are the Central Drug Co., of Detroit, who own four drug-stores in that city and one in Grand Rapids, Michigan.

Profit on Prescriptions.—There has been a good deal of discussion recently regarding the subject of making sufficient profit on prescriptions. Mr. Falkenberg, of Chicago, has suddenly become famous by insisting that a uniform profit of 200 per cent. should be made in every case. The editor of the "Midland Druggist" now suggests instead that something like uniformity in prescription-charges would be realised if pharmacists could be induced to charge a fixed percentage of profit on the material entering into a prescription plus a definite amount per hour consumed in compounding it. The first should include containers, corks labels, etc., and should yield a profit of 100 per cent. The second should be a minimum of \$1 per hour.

U.S.P. Titles.—"X-rayser's" rather caustic comment in The Chemist and Druggist (July 15, p. 89) concerning the Latin titles chosen in the new U.S. Pharmacopæia for the eleven synthetic chemicals that are recognised has been rather generally echoed in America. In fact there has been a great deal of tart criticism regarding the action of the revisers in refusing to give the trade names of these synthetics. Phenacetin, for instance, is known in fact by this name only, and no one will recognise it in the Pharmacopæia under the pedantic title of "Acetphenetidinum." And so it is with the ten other synthetics. Pharmacists will not know from the elaborate chemical names in the U.S.P. what particular synthetics are represented, and they will certainly never get to substituting these chemical names for the familiar trade titles that have now become a part of the language.

THE N.A.R.D. Sound.—Referring to a paragraph in our issue of June 17 (p. 947), in which it was stated that the National Association of Retail Druggists was apparently facing a financial crisis, Mr. Charles M. Carr, one of the Association officers, points out that it is true that since the last annual convention of the National Association no donations have been solicited among wholesalers in the drugtrade, and that during the current year the retailers as an organisation have been "paddling their own canoe." At all times since this policy has been adopted, however, the N.A.R.D. treasury has been in a fairly good condition, and the present outlook is that the Association will wind up the current year with a comfortable balance on the credit side of the ledger. Of course, it has been necessary for the executive officers to insist that the members pay their dues, and it is doubtless because of the insistent and repeated appeals to the field that the impression has gone out that the National Association was in financial straits. glad to have the assurance that our American confrères are appreciative of the good work of this Association.

A PROPRIETARY FORMULA.—One of the best-known American proprietaries is Ayer's sarsaparilla. As was stated in this column some time ago (C. & D., April 29, p. 659), the proprietors resolved to print the formula on the label. The J. C. Ayer Co. give the following as the composition of their speciality:

Each fluid ounce represents:

... 10 gr. Sarsaparilla-root ... 8 gr. ... 8 gr. Yellow-dock root ... Licorice-root Licorice-root ... Buckthorn-bark 4 gr. Burdock-root 3 gr. 2 gr. ... • • • Senna-leaves Black-colosh root 2 gr. ... Poke-root 1 gr. Stillingia-root 4 gr. ... • • • Cinchona red bark 2 gr. Potassium iodide 4 gr. ...

Solvent: Alcohol, 10½ minims to each fluid dram; glycerine; syrup; water.

One or two other proprietary-manufacturers are following

India and the East.

(News from our own Correspondents.)

MOWHA OIL.—A new industry has arisen in the Punjab, a good market being found for mowha oil (battia latifolia), which is being largely exported to the United Kingdom, where it is used in the manufacture of soap.

Indian Hemp, Cardamom, and Opium Ordinances.— The Ceylon Legislative Council met on July 24 and 25, when among the Ordinances introduced were the following: "To prohibit the cultivation and possession of Indian hemp, to impose an export duty on cardamoms, and to amend the Opium Ordinance of 1899. The Cardamom Ordinance was read a second time.

LORD CURZON ON INDIGO.—At Simla recently, Lord Curzon urged the Indian indigo-farmers to find ways of getting more colouring matter from their harvests by introducing scientific methods of selecting and caring for the plants. It was also suggested that a factory for preparing the colouring matter would pay better than money expended on the farms. All the indigo plants could be collected at such a factory and there treated in such a way as to secure the best results.

MORPHINE-SMUGGLING.—The following are recent examples of fines inflicted in a Straits Police Court for morphine-smuggling. In view of the trouble with this matter in South Africa these may be interesting:

In possession of morphine to the value of 24l., fine 50l., or four months' hard labour, and morphine confiscated.

In possession of morphine to the value of 18l., fine 50l., or three months' hard labour, and morphine confiscated.

Where does the morphine come from? is the query propounded by our Penang correspondent.

WATER PURIFICATION.—Experiments with copper sulphate for purifying water by killing algo and bacteria have been conducted at Calcutta by Dr. Nield Cook, Health Officer of the Corporation. A report on the subject has been presented to the General Committee, which states that after a number of carefully conducted trials with measured quantities of the chemical, Dr. Nield Cook is reluctantly forced to the conclusion that copper sulphate in the quantities generally prescribed by Drs. Moore and Kellarman is of little practical use for the purification of the filthy tanks that abound in Calcutta.

Foreign Qualifications in the Straits.—The Straits Government has decided on a policy of retaliation in reference to foreign medical men and chemists. In future neither of these will be licensed to practise in the Colony unless they possess a recognised British qualification. Those who are in business at the present time will be allowed to continue, but no other foreigners will be allowed to practise these callings unless qualified in Great Britain. This has given much satisfaction to medicos and chemists. At present the federated Malay States is the happy hunting-ground of all nondescripts in the healing art, but it is hoped that a Poison Ordinance will be passed there to keep in line with the Settlements, and that those in business who have obtained their pharmaceutical knowledge as dressers in Government employ will be prevented from practising as chemists.

Colonial and Foreign Mews.

It is reported from Belgrade that the import and sale of infants' foods in Servia is in future to be restricted to pharmacists.

Pharmacy Proprietors Combine.—According to the "Pharmatzevtitcheski Viestnik" the proprietors of pharmacies in Russia have determined to organise a union in order to combat the assistants. They are endeavouring to organise an all-Russian combination. Up till now their progress consists in a communication from the Government that a congress on the subject may only be permitted if all pharmacists agree to take part.

A Deadly Aperitif.—Six persons are reported to have been poisoned as the result of a dispensing-mistake at Casamassema, near Bari. They all went together about midday to a chemist's shop for a cooling drink such as is known on the Continent as "l'Apéritif." Within half an hour all were seized with excruciating pains, and in less than an hour four had expired, while the other two died the same evening. An investigation showed that the chemist had inadvertently supplied a deadly poison.

Too Mcch Public Zeal.—The "Monitor de la Farmacia" relates how the alcalde (mayor) of a village not far from Pampeluna, having received notice from the medical men of the district that one of their number had been disqualified, handed the notice right away to the local crier to be communicated to the populace. The gentleman who was disqualified sued the Mayor and he was condemned to three years six months and twenty-one days of exclusion from the community for grave damage inflicted.

Specialities in the Pharmacopæia.—The present Italian Pharmacopæia contains a number of formulæ for specialities. It appears likely that this section will be excluded from the proposed new revised edition, on the recommendation of the Consiglio Superiore di Sanita, it having been found that the insertion of the specialities in the pharmacopæia was used for purposes of advertisement, whereas it was intended originally to facilitate their admittance into foreign countries, and to further the export.

EGYPTIAN PHARMACY REGULATIONS.—The instructions distributed by the Sanitary Department to the proprietors of pharmacies enjoin that all proprietors must catalogue their stock of drugs alphabetically, while poisons, arranged in alphabetical order, must be placed in special compartments and grouped. Mineral waters must be kept underground if possible, to avoid the rays of the sun. The keys of all medicine chests, cupboards, drawers, etc., containing poison must be kept in the sole charge of a diplomaed pharmacist. All orders and prescriptions must be entered daily in a special register, and the shop assistants may not hand over to customers any medicine or drug containing poison. Prescriptions must be returned to their bearers, but in cases where they contain a medical error the pharmacist is to keep the document as a "pièce justificative," and give a copy to the person for whom it has been drawn up. Proprietors are held responsible for the purity of all drugs in medicines that leave their pharmacies.

LADY PHARMACISTS IN GERMANY.—Three months ago the Prussian Minister of Education issued an order permitting ladies (with the exception of charitable sisters and other ladies employed in connection with religious sick-fund associations) who fulfil the conditions for admission to pharmaceutical examinations to become pharmacists. The dearth of qualified assistants and the admission of women into pharmacy is to be a burning question at the forthcoming meeting of the German Pharmaceutical Association. A correspondent of the Berlin Tageblatt, writing on this subject, states that there is no lack of qualified employés at the present time, and that if those who have turned their backs upon pharmacy return to it, the supply would exceed the demand. The writer states that the reasons why men quit the business is because of the low salaries paid, and the absence of a legal sick fund and old-age-pension fund. With regard to the salary question he says that a competent and experienced dispenser only receives 7l. per month, inclusive of board and lodging, and that 9l. to 10l. per month is rare. He mentions the owner of a pharmacy who recently advertised for an elderly dispenser at the rate of 31. 15s. a month. The sale of pharmacies at higher prices only tends to further lower salaries, and the only general remedy lies either in the nationalisation of pharmacies, their conversion into municipal pharmacies, or the exercise of Government control on the transfer of such businesses. The writer goes on to express the opinion that the employment of women is only permitted in order that even cheaper labour than at present obtains may be secured. He suggests that ladies are not physically fitted to be pharmaceutical assistants under the present conditions of pharmacy. At present night service frequently entails the continuous attention of assistants for from forty-eight to sixty hours.

Personalities.

Mr. Ambrose Fry has joined the directorate of the Liverpool Borax Co., Ltd., of Old Swan, Liverpool.

Mr. Thomas Christy, F.L.S., who has been ailing since Whitsuntide, has become much worse within the last few days.

Mr. Robert Reah, druggist and drysalter, has been appointed a Justice of the Peace for the borough of South Shields.

The honorary degree of Doctor of Civil Law has been conferred on Dr. Charles Forshaw, of Bradford, by the Senatus Academicus of Potomac University, Washington, U.S.A. The Potomac University was founded and chartered a year ago.

DR. PLUMLEY, son of Mr. J. G. Plumley, chemist and druggist, Bristol, who is on a Swiss tour with one of his sisters, has just written home an account of his successful ascent of Mont Blanc. It is interesting to note that in June 1897 Mr. J. G. Plumley himself, in company with another Bristol gentleman, made the ascent of the Breithorn, from Dermatt, on the first day of the season.

Birth.

STAUNTON.—On July 28, at 8 Dominick Street, Galway, the wife of Edward P. Staunton, pharmaceutical chemist, of a daughter.

Marriages.

Brickell-May.—At St. Augustine's Church, Honor Oak, on August 10, by the Rev. Percy White Collard, Ethelbert Richard Brickell, of the firm of Brickell & Jones, chemists, Brondesbury, N.W., to Edith, only daughter of the late Mr. P. May, of Kilburn.

FRANCIS-WHITELOCK.-At All Saints' Parish Church, Castle Cary, Somersetshire, on August 8, by the Rev. Hereward Eyre Wake, M.A., Vicar, Thomas Hamer Hanbury Francis, chemist and druggist, to Edith, third surviving daughter of the late Mr. Frederick Whitelock, Fern House, Castle Cary.

THOMAS—FORSTER.—At St. Mary's Church, Dover, on August 5, by the Rev. Prebendary Palmer, Vicar of Saltwood, assisted by the Rev. Canon Barham, Vicar of St. Mary's, George Devenish Thomas, B.Sc., F.C.S., science master, Dover Secondary School, to Miss Forster, daughter Dover of the left Mr. C. H. Forster, chemist and druggiet. of the late Mr. G. H. Forster, chemist and druggist, Dover.

Deaths.

Barlow .- At Hyde, on July 31, Mr. Arthur Barlow, ehemist and druggist.

Briggs.—At Idle, Bradford, on August 7, Mr. Maurice Briggs, aged twenty-two. Mr. Briggs served his apprenticeship with Mr. F. Bell, chemist, Bradford, and remained with Mr. Belly and Chapter of the Chapter of the death of the Mr. Bell's successor (Mr. Clarkson) until the death of the latter. He then became an assistant to Mr. J. O. Moulson, of Bradford, and subsequently to Boots Limited. He was also for a time with Alderman Dunn, of Shipley, the President of the Bradford Chemists' Association. When he returned to Idle from a second engagement at Wellingborough he started business as a druggist.

GRIMWOOD.—At 104 Farringdon Road, E.C., Mr. William Grimwood, chemist and druggist, aged seventy-one. Mr. Grimwood, who was much respected, had been in business in Farringdon Road for about fifteen years, having taken over the business of Mr. C. J. Walker.

Houldon.—At Occleshaw House, Leyland, Preston, on August 12, Margaret, wife of Mr. Quarton Houldon, chemist and druggist, aged sixty-six.

SAUNDERS.—At Guy's Hospital, on August 7, after an operation, Mr. Charles John Heath Saunders, chemist and druggist, of St. Lawrence, Ramsgate, aged seventy.

WHEELER.—On August 14, at her residence, Eastbourne House, Victoria Park Road, South Hackney, N.E., Elizabeth Charlotte, widow of the late Mr. Christopher Wheeler, pharmaceutical chemist, of Hackney Road.

Recent Wills.

KNIGHT.—The will of the late Mr. John Knight, pharmaceutical chemist, of Rendezvous Street, Folkestone, who died on June 30, has been proved by his daughter Miss Hannah M. Knight, of London College, Romford Road, Stratford, and his son Mr. John Eddy Knight, 4 William Street, Devonport, chemist and druggist. The gross estate amounts to 1,819%, including net personalty 1,308%.

to 1,819%, including net personalty 1,308%.

Neweigin.—Mr. James Lesslie Newbigin, of Greenbatt House, Alnwiek, Northumberland, a director of Messrs. J. L. Newbigin & Son, Ltd., ehemists and druggists, of Alnwick, chairman of the old Local Board of Health and of the Alnwick Urban District Council, Governor of the Alnwick Infirmary, trustee of the Alnwick Savings-bank, and manager of the Clayport Street Presbyterian Church, who died on June 11 last, aged seventy-five, left estate valued at 9,194%, 198. 1%, gross, of which 5,920%, 5s. is net personalty. Probate of his will dated April 29, 1905, has been granted to his widow, Mrs. Emma Newbigin, of Alnwick, and his sons Mr. Lesslie Newbigin, of Alnwick, chemist; Mr. Edward Riehmond Newbigin, of 17 Tankerville Terrace, Newcastle, shipowner; and Mr. Henry Thornton Nowbigin, of 5 St. Nicholas Buildings, Neweastle-upon-Tyne, engineer. He bequeathed to his wife absolutely his household effects, with the use of his residence and the income from his shares in the said company for life; he bequeathed to each of his daughters 100%. and left an annuity of 50%, to his sister Miss Elizabeth Jane Newbigin, and the ultimate residue of his estate to all his children in equals have. the ultimate residue of his estate to all his children in equal shares.

THE LATE MR. LLOYD BULLOCK.

The subjoined article from the Singapore "Straits Times" refers to the late Mr. J. Lloyd Bullock, and is somewhat curious in referring to him as a City man, as Mr. Bullock's business was in the West End, while it was apparently written a few years ago, as Mr. Ord latterly has been at the head of Messrs. Bullock & Reynolds' business:

It is the proud boast of the City Fathers that when once a man has prominently identified himself with the commercial life and historie traditions of the City he cannot with impunity eut adrift from all its associations. Or, say they, the penalty of retirement becomes intolerable and not infrequently "mere leisure contributes to a shorter life." This is the view ninety-nine out of a hundred City men hold, and it is the view ninety-nine out of a hundred City men hold, and it goes a long way in explaining how it is one sees so many white-haired and venerable men actively engaged at the head of our great mercantile houses.

or our great mereantile houses.

Septuagenarians can be counted by scores, men who have passed the eighty mark are numbered in dozens; but the most interesting fast—and one that is probably unique and unparalleled in the history of any commercial city—has to be related—one of the City's merchants has reached his ninety-fifth birthday, and is still a very keen man of business. This gentleman, Mr. Bullock, has been a strenuous worker all his life.

As a young man he spent several years in France and Germany, devoting his life to pharmacy and scientific research work, and besides translating into English many of the

Germany, devoting his life to pharmaey and scientific research work, and besides translating into English many of the technical works of Continental savants, identified himself with the manufacture of pepsin, on which subject he is admitted to be one of the greatest authorities.

Winter and summer he rises at eockcrow, walks from his home in the West End Citywards, and after a busy day makes a point of getting to bed before 8.30 p.m. To this regularity of living his City friends attribute the secret of his longevity. In the late spring and early summer Mr. Bullock makes a practice of varying his early walks, and it is not unusual to see him out for an airing in the neighbourhood of Primrose Hill shortly after four o'clock in the morning.

Associated with him in his business is a Mr. Gardiner, who acts in the capacity of a manager. Mr. Gardiner is eightyfive, and, like other men, is not quite free from minor ailments. Reticence about his health is not one of Mr. Gardiner's virtues, and this occasionally leads Mr. Bullock, who is the most considerate and generous of men, to say when speaking of his manager: "Well, you see, young Gardiner hasn't got a good constitution."

Scientific Progress.

Temperatures under this heading are on the Centigrade scale.

Carlsbad Spring Gases .- Pesendorfer ("Chem. Zeit.," 29,359) has examined the gases evolved from the water issuing 29,059 has examined the gases evolved from the water issuing from the Carlsbad springs, and finds that they consist of carbon dioxide 99.19 per cent., oxygen 0.03 per cent., nitrogen 0.04 per cent., and 0.38 per cent. of residual gases, consisting of argon, helium, and emanation. The argon and helium were detected spectroscopically.

A New Incompatibility. — Fomenti ("Boll. Chim. Farm.," 44,196) finds that when salol, benzo-naphthol, and thymol are mixed a syrupy liquid is formed. The production of this seems to depend on the incompatibility of the salol and thymol, since these two alone also form a liquid, and when salol is added to an alcoholic solution of thymol oily drops separate. It is uncertain whether the oil is a definite abording separate. It is uncertain whether the oil is a definite chemical compound or merely a solution.

A New Reaction of Aconitine.—A writer in "Bulletin Commercial," June 30, states that he has submitted varying quantities of alkaloid in a porcelain dish to the action of five quantities of alkaloid in a porcelain dish to the action of five to ter drops of pure bromine, beating the mixture in a water bath to hasten the reaction. To this he immediately adds fuming nitric acid and evaporates to dryness in the same water-bath, leaving an oxidation product of yellow colour. He now adds a saturated alcoholic solution of potash, and evaporates to dryness, obtaining a mass, red or brown, more or less intense according to the quantity of aconitine. The dish is cooled, and five or six drops of an aqueous solution of copper sulphate added, and this produces an intense green colour.

Colour.

Cod-liver Oil.—Roder ("Pharm. Post," 1905, 390) gives the following figures as limits for good medicinal cod-liver oils, which are of interest on account of the numerous disputed figures lately published. Sp. gr. 0.920 – 0.931; acid value up to 3 in good oils, up to 10 in crude oils; saponification value 17.0 to 19.5 per cent. of KOH. Roder appears not to rely on Kremel's reaction (nitric acid). Five genuine samples he examined gave the following figures:

Sp. gr. Acid No. Sap. No. Kremel

	Sp. gr.	Acid. No.	Sap. No.		Kremel.
1.	0.9253	0.8		cent.KOH	Yes.
2.	0.9261	3.2	18.88		No.
3.	0.9275	1.0	19.00		Yes.
4.	0.9289	1.8	18.99		Yes.
5.	0.9262	8.9	18.75		Yes.

5. 0.9262 8.9 18.75 Yes.

Sinacid-butyrometry.—Under this somewhat alarming name Sichler ("Journ. de Pharmacie," 1905, 368) has proposed a new process for the determination of fat in milk and allied products. The process is as follows: A solution of sodium triphosphate (15 per cent.) in water is prepared; 10 c.c. of this solution are introduced into the apparatus devised for the purpose (the sinacid-butyrometer), with 10 c.c. of milk and 1 c.c. of butyl alcohol. The mixture is maintained at 60° to 75° C. for three to five minutes, and then well shaken and allowed to stand. The casein is retained in solution by the sodium phosphate, the albumen is precipitated without any fat, whilst the fat floats as an oily layer at the top of the liquid, containing a little butyl alcohol. The amount of alcohol is fixed and is determined by experiment and allowed for, and the reading of the fat is easy in the graduated tube. alcohol is fixed and is determined by experiment and allowed for, and the reading of the fat is easy in the graduated tube. No centrifugal machine is necessary. The operation takes two hours, which is the only objection.

Liquid Storax.—Roder gives ("Pharm. Post," 1905, 392) a valuable series of figures for thirteen samples of liquid storax, an oleoresin for which but few figures have been published.

His results are as follows:

Ì				Petroleum ether extract.		
	Acid No. Sap. No.	Ester No.	Aeid.	Sap.	Ester.	
1 2 3 4 5 6 7 8 9 10 11 12 13	71 64.5 71 72 70 69 94 62 91 57.5 70 72 68	188 192 195 200.5 196.5 192 180.5 187.5 183 190 183 206 187	117 127.5 124 128.5 128.5 128.5 125.5 86.5 125.5 125.5 131 134 119	62.5 61.0 59 — 101 42 93.5 31.5 66 —	189 202.5 192.5 — 181.5 195 180 194 190 —	126.5 141.5 133.5 80.5 153 86.5 162.5 124

Two samples, Nos. 7 and 9, whose ester figures are abnormally low, were found to contain common rosin. The figures for the other eleven samples are, with slight exception, very constant, and are of great value. The point is that the acid value should not be too high, nor the ester value too low.

Business Changes.

Properly authenticated business notices (not being advertisements) are inserted in this section free of charge if promptly communicated to the Editor.

Mr. John Richardson, chemist and druggist, has removed his business to 44 Station Road, Hadfield.

 $M_{\rm R}$. E. E. Haslegrave has purchased the business at 50 Balm Road, Hunslet, Leeds, formerly carried on by Mr. W. Robinson, chemist and druggist.

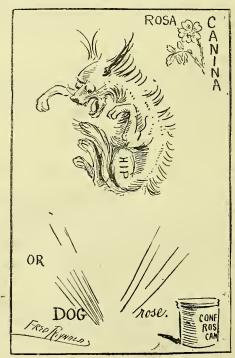
Mr. John Dale, Steel Bank Pharmacy, Sheffield, has disposed of his branch business at 258 South Road, Walkley, to Mr. G. Bennett, chemist and druggist.

Trade Motes.

ELECTRIC WELDING.—The Steel Barrel Co., Ltd., Uxbridge, send us a copy of their Pamphlet No. 2, which illustrates the application of electric welding to solid steel barrels and apparatus. The illustrations refer to varnish-making machinery, a tar-distillers' still and condenser, and steel barrels and drums of various kinds for paraffin, spirit, and strong sulphuric acid. The joints are welded by an electric method, the patents for which are owned by the company.

THE NEW PRICE-LIST of Messrs. May, Roberts & Co., 9 and 11 Clerkenwell Road, London, E.C., runs to nearly 500 pages and deals with druggists' sundries, packed goods, perfumery, photographic goods, and proprietary medicines. The list seems to us to be bulkier than usual, the photographic goods. graphic section being now an important part of the list. We have no doubt that the firm will send a copy of the list to any of our subscribers who have not received one.

MESSRS. BURROUGHS WELLCOME & Co., Snow Hill Buildings. E.C., inform us that their warehouses will be closed on August 31, for the purpose of stocktaking.



An Illustrated B.P.

It has been suggested that the next edition of the British Pharmacopæia should be diversified with cuts. Mr. Reynolds is prepared to supply the General Medical Council with original designs, "as sample."

Observations and Reflections.

By XBAYSER.

The Chemist's Apprentice,

who apparently still exists, was solicitously catered for last week. If plenty of friends and advisers is a blessing, he is a fortunate young man. The course of his studies is carefully mapped out for him; scholarships, prizes, and applause are strewed along his path; and now it is proposed in more than one quarter that inspectors should be appointed by the Pharmaceutical Society to see that he is properly taught the art and mystery to which he has committed himself. It is almost sad. How much coddling is too much it is not easy to say; but it is only fair to the lads concerned to note that they do not ask to be so lovingly shepherded. Adam Smith, who vigorously attacked the apprenticeship system which was prevalent in his day, urged as one of his objections to it that it tended to make the apprentice idle "because he has no immediate interest to be otherwise." We have altered that in pharmacy, at all events. The chemist's apprentice of the twentieth century has to bear both the burdens bequeathed to him from the master apothecaries of Adam Smith's acquaintance and the penalties devised by the examination maniacs of the last fifty years. He has not only to acquire manual dexterity and shop and laboratory skill, but in all his spare moments he must be chipping at

The Tree of Knowledge,

not for his own mental nourishment, nor to satisfy a healthy appetite for learning, but merely that he may store up some splinters in view of his journey across that black mountain of examination which always looms in front of him and darkens his life. Try, professors and presidents and editors, to realise the dismay which must possess the soul of the ordinarily constructed novice when he reads the story of Dr. Senter's career, or the exposition of his home study contributed by "A Country Student." Perken and Kipping, supplemented by Bernthsen, Remsen, Ostwald, Clowes and Coleman, and Fenton—he has to absorb the learning of all these great men to get round only one of his six subjects; and even then "A Country Student" informs him cerium and lithium have not been included. Of course, cerium and lithium would be the elements selected by the examiners. I am not at all sorry for Dr. Senter or "Country Student": they have found their groove; they are enjoying themselves. But may I not console the youth whose ambition is limited to the ownership of a shop with coloured bottles in the window (and such persons are still necessary), by explaining that the gentlemen named are aiming at something quite different from that?

Prescription Law

has interested the Courts in America more than in this country, and I read in the "Medical Press" that a Brooklyn judge has recently given "a luminous statement of the plain rights of the matter." Judge Gaynor considers that a prescription should be sent by the doctor to the pharmacist under seal, should be preserved by the pharmacist, and should be accessible only to him and the writer. "The patient pays the doctor for what he knows and is able to do for him at the time of consultation," says the Judge. The patient "does not pay for a visible or tangible prescription, and to any knowledge to be derived from it neither he nor anyone now or hereafter has the slightest right." Luminous nonsense, your Honour. If, for a fee or without one, a lawyer, a schoolmaster, a lecturer, a builder, a gardener, a chemist, or any other person whatsoever imparts any item of information to anybody, that body can make use of that information or advice throughout the whole of his after-life. Why a doctor's information or advice should be legally sacred is not obvious.

Nicolas Lemery,

whose works were referred to on this page last week, was one of the most interesting pharmacists of whose lives we have record. Born at Rouen in 1645, he was apprenticed to an uncle, an apothecary, in that city, expecting, as so many other youths have done, to be taught chemistry, and not shop-dusting or putting up parcels. The uncle did not come up to Nicholas's anticipation, so he left him and went to Paris, where he obtained a situation with the Demonstrator of Chemistry at the Jardin du Roi, a rather noted man, named Glazer. But Glazer, apparently, was not much better than the uncle. He had probably only acquired the jargon of alchemy-at any rate, he could not or would not impart instruction-and two months with him sufficed. The rolling stone then proceeded to Montpellier, and there he was satisfied with his employer, a pharmacien named Varchant. Lemery had the run of Varchant's laboratory, and in twelve months was teaching the science to the élite of the city. He stayed three years at Montpellier, and passed another year or two in travelling about France, In 1672 he came back to Paris, and soon after was admitted a master apothecary. He opened a pharmacy in the Rue Galande, and taught chemistry in an adjoining laboratory. His lectures became the fashion; it is said that, among others, forty Scotchmen attended them. His phenomenal popularity was largely due to the fact that he was the first to teach science in French instead of in Latin. The business of his pharmacy is also described as prodigious. He sold a Spanish White, a magistery of bismuth, for the complexion, which alone paid his rent. He was also famous for a comforting opiate and a gentle emetic. In 1675 he published his treatise on chemistry, which was far in advance of any similar work then known. Fontenelle says it was bought and read as eagerly as if it had been a romance or a satire. He was elected to the Academy of Sciences, and was noted throughout Europe. Everything was prosperous with him, when suddenly in 1681 his pharmacy was closed, and his lectures stopped by the police, for

Lemery was a Protestant.

The Elector of Brandenburg invited him to Berlin, but he chose to settle in London. Charles II. received him cordially, and he presented that monarch with a copy of his "Chemistry." He could not make himself at home in England, however, and in 1683 he went back to France, took a doctor's degree at Caen, and practised as a physician at Paris. In 1685 came the Revocation of the Edict of Nantes, and Lemery found himself once more in the ranks of the unemployed. It would have been pleasant to add that he again emigrated. He was only forty, and might have won a great position in England, Germany, or Holland. Sad to tell, however, he abjured his faith, joined the Catholic Church, got letters patent from Louis XIV. which permitted him as an exceptional privilege to carry on the professions of medicine and pharmacy simultaneously, and lived in peace and prosperity to the age of seventy.

CORFU OLLVE OIL.—The estimate of the olive-oil crop in the Ionian Islands last year amounted to about 90.000 barrels of 16 gals., equal to about 1,440,000 gals., one-third for eating and two-thirds for burning purposes. About 27,000 barrels, equal to 432,000 gals., were exported to Russia, almost all for burning-purposes, at about 27l. to 30l. per tun in 1904, and at 32l. to 38l. per tun from January to March, 1905, f.o.b. Corfu. Up to the end of March, 1905, only 127 barrels were shipped for the United Kingdom, at about 40l. per tun f.o.b. Corfu.

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Editorial Comments.

Atomic Evolution,

It is at least fitting that Professor G. H. Darwin should choose as the subject of his address before the British Association one with which the name of his illustrious father is indissolvably connected—that of evolution. Following up our notes of last week we should preface our remarks by stating that the official party landed at Cape Town from the Saxon on August 15, and that the same evening Professor Darwin delivered his address in the new City Hall. The Association was welcomed by the Governor, Sir Walter Hely-Hutchinson, and Sir William Crookes introduced the new President. This year an innovation has been inaugurated in dividing the President's address into two parts, the second part being put down for delivery at Johannesburg on August 30. Professor G. H. Darwin is the second son of the late Charles Robert Darwin, author of "The Origin of Species," and he is Plumian Professor of Astronomy and Experimental Philosophy at Cambridge. Professor Darwin's published works have been chiefly concerned with mathematical science, and hence the theory of evolution, which forms the main subject of the first part of his address, is approached from a mathematical standpoint rather than from the naturalist's point of view. It deals with evolution as regards the constitution of the universe and with the part which mathematicians have taken in demonstrating the theory. To living men it seems, from the marvels of discovery that are yearly unfolded, as though the development of knowledge was proceeding at a faster rate than usual, but from a wider point of view the scale of time is relatively unimportant, for the universe is leisurely in its procedure. Whether the changes be fast or slow they form a part of a long sequence of events which began in some past of immeasurable remoteness and tend to some end which cannot be foreseen. The man who propounds a theory of evolution is attempting to reconstruct the history of the past by means of the circumstantial evidence afforded by the present, thus differing from the historian, who needs much of the human element to clothe his facts. The evolutionist must form a theory from the facts before him, and only sobriety of judgment distinguishes the great theorist from a fantastic fool. As hardly any theory is true, the test of a scientific theory is the number of facts which it embraces into a connected whole, and hence theories may be inconsistent, but useful as pointing the way to truth. Referring to the theory of natural selection and the transformation which this theory has wrought in the world of science, Professor Darwin pro-

ceeded to deal with the parallel doctrine in the case of inanimate nature, and although inanimate matter moves under the action of forces which are incomparably simpler than those governing living beings, yet the problems of the physicist and the astronomer are scarcely less complex than those which present themselves to the biologist. The timescale in the transmutation of species of animals is furnished by the geological record, although it is not possible to translate that record into years, while the time needed for a change of type in atoms or molecules may be measured by millionths of a second up to millions of years in the case of stars. If the conditions which determine stability of motion could be accurately formulated throughout the universe the past history of the cosmos and its future fate would be unfolded. The study of stability and instability thus furnishes the problems which the physicist and biologist alike attempt to solve, but, as the address showed, with comparatively little success so far. The mathematician's method is to mentally construct an ideal mechanical system or model intended to represent the leading features of the system he wants to examine, and then study the possible stable and unstable configurations and the circumstances which will cause transitions from one to the other. Finally, his results have to be applied to actual matter, and from this he judges to what extent it is justifiable to interpret Nature by means of these results. As illustrating the principles and methods of the various investigations, Professor Darwin applied the theory of natural selection to the atoms of a chemical element. The alchemists dreamed of transforming the baser metals into gold, but it is left to modern researches to furnish a sufficiently clear idea of the structure of atoms to enable us to see what would have to be done to effect a transformation of elements. The essential diversity of the chemical element was up till ten years ago accepted by the chemist as an ultimate fact, but within the last few years the researches of Lenard, Röntgen, Becquerel, the Curies, Larmor, and Thomson have shown that the atom is not indivisible, and have thrown a flood of light thereby on the ultimate constitution of matter. The atom has been shown to consist really of a large number of component parts known as corpuscles or electrons, and which may be described as particles of negative electricity. Thomson's experimental atom has been examined by mathematical methods, and yields the information that there are definite arrangements of the orbits in which the corpuscles must revolve if they are to be persistent or stable in their motions. An infinite number of types is possible, possessing greater or lesser degrees of stability, and by a continuation of this argument we are led to conjecture that the several chemical elements represent those different kinds of communities of corpuscles which have proved by their stability to be successful in the struggle for life. Such a conclusion is an absolute contradiction of all that was known of the elements until recently, for no symptoms of decay are perceived, and the elements existing in the solar system must already have lasted for millions of years. Nevertheless, there is good reason to believe that in radium, and in other elements possessing very complex atoms, we do actually observe that break-up and spontaneous rearrangement which constitute a transmutation of elements. The President is to consider the various theories of evolution in the heavens in the second part of his address, but chemists will meanwhile find much food for thought in the outline of the first part of the address which we have briefly sketched.

The different sections of the British Association began their meetings on August 16, the South African College, Cape Town, being requisitioned in addition to the City Hall.

The Legislative Session.

The sixth Session of the first Parliament of King Edward VII. was brought to a close on August 11. Politically the Session is spoken of as a barren one, in the sense that no measure of first-class public importance received the Royal assent. As to trade measures, the fate of the Pharmacy Bill is too recent to require any further reference. In marked contrast to this ill-fated Bill was that of the Trade-marks Act, 1905, which received the Royal assent last week, and which becomes law on April 1, 1906. The Bill was introduced by Mr. Fletcher Moulton in March, and being unopposed by the Government and placed in the category of non-contentious Bills, had what should be the normal course of all good measures. As recently as March 25 we gave an outline of the chief provisions of this Act, which, although largely of a consolidating character, nevertheless contains useful amendments. A registrable trade-mark must by this Act contain or consist of at least one of the following essential particulars :

The name of a company, individual, or firm represented in a special or particular manner;
 The signature of the applicant for registration or somo predecessor in his business;

3. An invented word or invented words;
4. A word or words having no direct reference to the character or quality of the goods, and not being according to its ordinary signification a geographical

name or a surname;
5. Any other distinctive mark, but a name, signature, or word or words, other than such as fall within the descriptions in the above paragraphs (1), (2), (3), and (4), shall not, except by order of the Board of Trade or the Court, be deemed a distinctive mark.

The mark may be limited to one or more specified colours, and by Section 15 the process of disclaiming is more distinctly regulated. Section 37 is one calculated to put down a practice that has arisen of registering trade-marks in classes which it was never intended to use, the idea being solely to prevent the use of a word in any way. This section is as follows:

A registered trade-mark may, on the application to the Court of any person aggrieved, be taken off the register in respect of any of the goods for which it is registered, on the ground that it was registered by the proprietor or a predecessor in title without any bond-fide intention to use the same in connection with such goods, and there has in fact been no bonâ-fide user of the same in connection therewith, or on the ground that there has been no bonâ-fide user of such trade-mark in connection with such goods during the five years immediately preceding the application, unless in either case such non-user is shown to be due to special circumstances in the trade, and not to any intention not to use or to abandon such trade-mark in respect of such goods.

The Act, which is a long one, deals largely with the procedure to be adopted in cases of dispute, defines the powers of the Registrar, and gives the applicant increased facilities for applying to the Courts for revision of any decision of the Registrar.

Section 41 enacts that in all legal proceedings relating to a registered trade-mark the original registration of such trademark shall, after the expiration of seven years of such registration, be taken to be valid in all respects, unless the mark was obtained by fraud or is of the deceptive character defined in Section 11. Some revision has been made in the matter of Sheffield marks and cotton-marks.

There is a section in regard to the use of the Royal arms which appears to be more stringent than the present enactment. The new section is as follows:

If any person, without the authority of his Majesty, uses in connection with any trade, business, calling, or profession, the Royal arms (or arms so closely resembling the same as to be calculated to deceive) in such manner as to be calculated to lead to the belief that he is duly authorised so to use the Royal arms, or if any person without the authority of his Majesty or of a member of the Royal Family, uses in connection with any trade, business, calling,

or profession any device, emblcm, or title in such manner as to be calculated to lead to the belief that he is employed by or supplies goods to his Majesty or such member of the Royal Family, he may, at the suit of any person who is authorised to use such arms or such device, emblem, or title, or is authorised by the Lord Chamberlain to take proceedings in that behalf, be restrained by injunction or interdict from continuing so to use the same: provided that nothing in this section shall be construed as affecting the right, if any, of the proprietor of a trade-mark containing any such arms, device, emblem, or title to continue to use such trade-mark.

The Medical Act (1886) Amendment Act, 1905, which has now passed into law, has nothing in common with the highly contentious Bill which is being promoted by the British Medical Association. The Act consists of only one section giving power to make reciprocal arrangements with Canada, which, owing to the wording of the Medical Act (1886), could not be done. The 1886 Act stipulated that where any Colony had a provincial and a federal organisation reciprocal arrangements could only be made with the Federal Government. As education is entirely in the hands of the Provincial Governments in Canada, it has hitherto not been possible to take advantage of the reciprocal provisions of the 1886 Act. The anomaly has now been removed.

The National Revenue.

THE forty-eighth Report of the Commissioners of His Majesty's Inland Revenue, to which a brief reference was made last week, deals with millions. The gross receipts of the Inland revenue for the year ending March 31, 1905, was 106,330,152l., of which sum 9,573,508l. was surrendered to the Local Taxation Accounts, the remainder being paid into the Treasury. Of the item of 106 millions referred to, 90½ millions was collected by the Inland Revenue, 6 millions by the Customs, and $2\frac{1}{2}$ millions by the Post Office. The remainder of the 106 millions was collected by the Inland Revenue on behalf of other departments. Compared with the previous year there was an increase in the net receipts of the total revenue in 1903-4 of 408,623l. The report of the Commissioners is conveniently reviewed in sections. The first, the Excise duties, includes spirit, glucose, and saccharin duties and licences. Of the 36 millions received in this section of the Inland Revenue, 31 millions is derived from beer and spirit duties, the spirit duty showing a decrease of half a million. From glucose the duty received was 86,567l., an increase of 3,942l., while the saccharin duty increased 9,768l. on a total of 10,674l., the quantity charged being 170,778 ounces. Licences have yielded an increase of 44,4891.; but when it is added that the beer duty decreased almost as much as the spirit duty it does not surprise one to see a total decrease on this section of nearly 900,000l. The Commissioners refer to the recommendations of the Departmental Alcohol Committee which, as far as they entailed additions to or amendments of the law, were embodied in the Revenue Bill, 1905, which so far has failed to meet with the approval of Parliament. As noted last week, the number of proof gallons of spirit methylated in the last financial year was 5½ millions. The Excise licences yielded over 4 millions, the bulk of the money being derived from publicans' and spirit-dealers' licences. The licences in which the drug-trade is more immediately concerned are glucosemanufacturers (26), saccharin-manufacturers (2), methylatedspirit makers (30), methylated-spirit retailers (17,424), stills (922), patent-medicine makers or vendors (40,129). The yield from patent-medicine licences was 10,030l., and from methylated-spirit retail licences 8,5681. There has been a steady increase in the number of patent-medicine licences from 30,234 in 1894-5, to the present figure of 40,129. The amount of duty received from medicines was 331,439l., against 323,446l. in the previous financial year. This section

shows a steady increase each year since 1894-5, when the amount stood at 234,8811. The fact that the number of licences is steadily increasing as well as the amount received from stamp-duty would probably be an important factor in influencing a Chancellor of the Exchequer who was asked to abolish these sources of revenue which, if relatively small, yield a certain annual sum. There were 1,124 certificates of registration of alkali works issued in the last financial year yielding 3,534l., the figures being of interest as the number is 73 fewer than in the previous year. The other items in the Commissioners' report that claim attention are the amount of over 2 millions received from inhabited-house duty, and 31½ millions from income-tax. The number of residential shops charged with inhabited-house duty was 312,634, the annual value being placed at over 16 millions. The figures of the amount of income-tax payable on the profits from "businesses, concerns, professions, employments, and certain interest" refer to the year 1903-4, the gross amount of income dealt with under this head being 502 millions, an increase of nearly 11 millions on the previous financial year. An analysis of these figures as regards the number of assessments and persons and firms from whom the money was collected is here given:

	Number	Yield
Persons Firms Public companies Local authorities Bankers, coupon dealers, etc , deducting tax on behalf of the Revenue	471,526 58,617 30,366 9,751	£ 128,290,267 88,576,236 245,483,956 17,314,153
		502,402,516

The figures as regards "persons" include 99,224 assessments on employés, representing a gross income of 23,049,1471. The relative amount of income assessed from persons, firms, and public companies is one which will arrest the attention of thinkers.

The B.P.C. Visit to Paris.

The impression that remains in Paris of the visit of B.P.C. members to Paris in the early part of the month is distinctly a favourable one. It was a happy coincidence that it preceded by a few days the important and historic visit of the French fleet to England. The welcome the party of British chemists met with in Paris was not less cordial than the rousing reception accorded in England to Admiral Caillard's fleet. The entente cordiale is by no means a dead letter, when, as by a fairy wand, it causes the doors of famous seats of learning to be opened to visitors at their own time and hour in a city like Paris. appreciation should be accorded to Dr. Roux for the manner in which he received the British visitors at the Pasteur Institute. Dr. Roux combines the traditional courtesy of his nation with those scientific qualities which have secured him world-wide fame, and personally conducted the party through the famous laboratories of the Institute. Letters we have received from members of the party show us that the visit was enjoyed, and we are sure that chemists generally appreciate the kind attention that was meted out to our nation and the craft. When memory fleets back to less quiet times when Paris has been shaken, as it were, to its very foundations, the motto of the city, "Fluctuat nec mergitur," seems particularly felicitous, for, phœnix-like, Paris seems to rise more magnificent and stronger as time goes on.

Preparation of Honey for the Market.

Of recent years considerably increased attention has been paid to apiculture in this country, owing principally to the efforts of the county beekeepers' associations, whose servants are always ready to render assistance to apiarists for a nominal sum. There is, however, much to be learned about the profitable preparation of honey for the market, so that the four-page leaflet dealing with this subject which has been issued by the Board of Agriculture will be of interest to beekeepers who are about to market their new crop. The leaflet states that comb-honey (in section cases) should be translucent, showing the bright clear colour of the contained honey, evenly and delicately worked out to the sides and bottom of the section, and with a scrupulously clean surface. The finest liquid extracted honey should be bright and clear, of a light straw colour, and delicate in flavour and aroma. Granulated extracted honey should be of fine even grain, creamy white in colour, and of good flavour. There are many grades of medium and dark-coloured honeys below this first-class standard, but the latter is what the beekeeper must strive to attain in order to command a ready sale for his produce. Provincial chemists who buy supplies of honey from local apiarists would do well to call attention to this leaflet, which also gives tull details of the preparation of comb-honey in sections, packing, glazing, and the method of obtaining "extracted" honey.

Doctors and Proprietaries.

The action of the American Medical Association in endeavouring to control the output of proprietary medicines has received the approval of the "Lancet." In last week's issue of our medical contemporary, the rules drawn up by the Council of Pharmacy and Chemistry (as they appeared in THE CHEMIST AND DRUGGIST of July 22, p. 174) are printed in full. The "Lancet" suggests that measures of a similar character might with advantage be adopted in this country, adding that it should not be difficult to find funds for the purpose, especially if a working arrangement were made with the American Medical Association whereby each country should investigate its own products to avoid covering the same ground twice. Such an arrangement would, it seems to us, entail a maximum of the work on the American Association. Moreover, have we not already in London an analogous body? In the centre of the West-end medical quarter there is an institute of hygiene (with a permanent exhibition as a side-line) which possesses an "Examining Board" specially designed to investigate the merits or demerits of proprietary food-products and medicinal preparations. "The exhibition," we were informed at the opening, "is under the auspices of a council consisting of eighteen medical men who are known authorities on hygiene and public health." The nucleus of the "Council of Pharmacy and Chemistry" is already in evidence, but the "Lancet does not push the idea too far. Instead it branches off in its commentary to the dangers of "self-drugging" and the evil of unauthorised repeats. "Pharmacists should be requested to consider it a breach of etiquette to copy a prescription for a patient or to make it up for any other person," says the "Lancet," and "it should be a rule that no proprietary medicine should be delivered to the patient in the original package, in order to prevent the purchase of further supplies without a prescription." Such a set of rules, "supplemented by a more complete code of pharmaceutical etiquette," should find a place in the system of medico-pharmaceutical ethics. Thus the organ of the medicos, and it is somewhat amusing to note the complacence with which the pharmacist is blamed for a state of things for which the medical profession is mainly responsible.

Westminster Wisdom.

(From our Parliamentary Representative.)

PROROGATION.

Parliament was prorogued by Royal Commission on August 11, and among the Acts which received the Royal assent were the Medical Act (1886) Amendment Act, and the Trade-marks Act.

Dogs for Vivisection.

Mr. Griffith, in the House of Commons on August 10, asked the Secretary of State for the Home Department whether his attention had been called to the fact that dogs were bred specially for the purpose of vivisection at the Brockwell Hall and other farm-laboratories; and if he would cause a return to be made of the places at which dogs were being specially bred for this purpose, the laboratories at which experiments were performed on them, and the nature and purposes of such experiments.

Air. Akers-Douglas, in reply, said: I have made inquiry, and I understand that dogs have been bred at Brockwell Hall and that some of the dogs so bred have been used for experiments in the laboratories. I do not think it is of material importance whether dogs which are used for purposes of experiment are bred on the premises or imported from elsewhere, and as it is not a matter over which I have any control I fear I cannot undertake to furnish the return suggested.

COCOA-BUTTER DUTY,

At the same sitting the Chancellor of the Exchequer informed Sir H. Vincent that the total amount of public revenue yielded by the duty on cocoa butter since its imposition—viz., from August 7, 1896, to July 31, 1905—was 23,065/. The yield of the duty in the twelve months ended July 31, 1905, was 1,783/.

STERILISED DRINKS FOR THE ARMY.

On August 10 Sir H. Kimber asked whether, in accordance with the recommendation of the Advisory Medical Board that all fluids employed as drinks at manœuvres, on service abroad, and on active service should be sterilised by heat, suitable apparatus and equipment for this purpose has been issued to the whole of the British troops in India and South Africa for service in the field and at manœuvres; whether the service of such sterilised fluids has been entrusted to specially trained men, having no other duties, in each unit, as recommended by the Commission on Dysantery and Enteric Fever appointed by the Secretary of State for War, August, 1900; whether such specially trained men are placed under the direct supervision and responsibility of officers of each unit; and whether the regulations revised in the direction of devolving responsibility upon non-medical officers in the supervision of sanitary services in barracks and camps have been issued.

Mr. Arnold-Forster replied: My hon. friend is mistaken in supposing that the Advisory Board made such a sweeping recommendation as that stated in the question. Trials were recommended, and these have been made both on service and at manœuvres; further investigations are still in progress. Heat sterilisation is being largely carried out at various places abroad, including India and South Africa. The supervision of water-supplies and methods of water sterilisation, where required, are in the hands of the local authorities, and sanitary officers have been appointed at home and abroad, among whose special duties are the periodical examination of the drinking-water supplies and the diffusion of knowledge of practical sanitary procedure

among officers and men. Australian Postage.

Mr. Henniker Heaton, on August 10, asked whether the Australian Commonwealth have placed a duty of 3d. per pound on all price-lists, catalogues, etc., entering Australia through the Post Office from the United Kingdom, and whether, seeing that trade is hampered by this impost, and in view of the representations of merchants as to the annoyance caused by the regulation, arrangements can be made for the payment of the duty in this country.

Mr. Lyttelton said arrangements had already been made for the payment of the duty in this country through the

Agents-General for the Australian States.

Legal Reports.

Anti-cutting Agreements.

In the King's Bench Division on August 10, Mr. Justice A. T. Lawrence heard the case of Sales Co., Ltd., v. Jones & Co., which was an action by the owners of Felsnaptha soap against a firm of wholesale grocers in Liverpool. Plaintiffs claimed twenty guineas. Mr. Eldon Bankes, K.C., who appeared for the plaintiffs, said his clients tried to fix the price at which the soap should be sold, not only by the wholesalers, but by the retailers, in order that everybody should secure a fair profit. They entered into an agreement of a non-cutting character with everyone who bought their soap. The basis was that they sold the soap to wholesalers at 20s. 10d. per case, less 20 per cent., 5 per cent., and $2\frac{1}{2}$ per cent. for cash. Twenty per cent. off 20s. 10d. brought it to 16s. 8d. When the wholesaler sells it he must not sell it for less than 16s. 8d. He must not sell it again at less than $2\frac{1}{2}d$. per bar; 16s. 8d. per case was 2d. per bar, so that the retailer obtains the $\frac{1}{2}d$. One of these agreements was entered into with the defendants. They sold some soap again, however, to Morris, Jones & Co., another wholesale firm in Liverpool, at the price of 16s. 8d., and this was the breach of the agreement. If the plaintiffs had sold the soap direct to the second firm they would have made a profit, but as they obtained the soap through the defendants the plaintiffs did not make this Whatever the motive for this method of dealing was, the plaintiffs were determined to stop it, if possible. Mr. Ashton, for the defendants, contended that the soap in question was merely a loan from one firm to another, and was not a considerable quantity. It was merely a case in which one firm had accommodated another, and the agreement did not prevent them doing this.

His Lordship took this view, and judgment was entered

for the defendants.

The Use of the Red Cross.

REFERENCE was made in THE CHEMIST AND DRUGGIST, July 22, p. 119, to the litigation which has been going on in the Court of Chancery, New Jersey, U.S.A., between Johnson & Johnson and Seabury & Johnson in regard to the use of a red cross on packages of absorbent cotton, gauze, and medicated cotton. The full judgment is now to hand, and we are enabled to give fuller particulars of this interesting case.

Vice-Chancellor Bergen, in his summing-up, said the case for the plaintiffs (Johnson & Johnson) did not rest upon a trade-mark right, but upon the principle that unfair competition in business, resulting in the confusion and sale of the goods of one as those of another, to the injury of the consumer and loss to the party whose goods have been simulated, would be enjoined. The plaintiffs state that they had, by distinctive packages, the use of unique labels, of which a red Greek cross was a prominent feature, and by advertisement, acquired in the market the names "Red Cross Cotton," "Red Cross Gauze," and "Red Cross Goods." The defendants (Seabury & Johnson) answer this by claiming prior use of the red cross symbol, and that the symbol is of so general a character as to make it publici juris so that neither of the parties have such special right to it as would justify the interference of the Court.

Both parties are corporations under the law of New Jersey. The business of the complainants was incorporated in 1887, and the defendants under the laws of New York in 1893 and under the laws of New Jersey in 1896. Since 1874 defendants' predecessors had conducted a business to which the company succeeded. Johnson & Johnson, about 1887, offered an absorbent cotton superior to any that had before been produced, interleaved the cotton with blue tissue paper, and enclosed it in a blue carton with labels entirely distinct from others, their cotton acquiring the name "Red Cross Cotton. Seabury & Johnson, about 1890 (after complainants had established a market for their goods under the title "Red Cross"), put up an inferior grade of cotton-wool in similar packages, and subsequently commenced the use of a seal with a small red cross in the centre. This seal had been used by defendants in 1884 for covering cork stoppers to bottles not containing absorbent cotton. The cross in

the centre was subsequently enlarged so as to make it a conspicuous feature of the label. The confusion or unfair competition which the law condemns only arose when defendants simulated the complainants' packages, and adopted the use of the red cross.

Another point which the Vice-Chancellor referred to was that the complainants did not come into the Court with clean hands, owing to the fact that in 1895 they inserted in their price-list a notice that the use of the red cross as a symbol had been vested in the American National Red Cross Society, and that they had been granted the exclusive use of the red cross. The Bill under which this right was to have been conferred failed to become law, this being within complainants' knowledge at the time the announcement was made. The advertisement, however, had been withdrawn three years before the suit was instituted, and this justified the Court in hearing the case.

The Vice-Chancellor held that the complainants were en-

The Vice-Chancellor held that the complainants were entitled to an injunction order restraining the defendants from using the red cross on absorbent cotton or gauze, and from imitating Johnson & Johnson's packages of absorbent cotton or gauze, the costs of the suit to be paid by Seabury &

Johnson.

As stated in The Chemist and Druggist, July 22, p. 119, the defendants have appealed from this decree.

Sale of Food and Drugs Acts.

GROUND LIQUORICE-ROOT.

At Gateshead on August 10, Messrs. George Coverdale, Ltd., wholesale and retail chemists, York, were summoned for selling four ounces of ground liquorice-root which was not of the nature, substance, and quality demanded. The analyst certified that the sample contained 10 per cent. of cornflour. On behalf of the defendants it was stated that they bought the liquorice-root from a firm in London under a guarantee, taking the firm's good word for its purity. It was bought last August, but the firm would not now hold themselves responsible for last August's purchases. The defendants were fined 10s. and costs.

County Court Cases.

HAIR-NET DISPUTE.

In the City of London Court on August 15, before his Honour Judge Lumley Smith, K.C., an action was brought by Charles W. Juzi, trading as Hiat & Juzi, 2 Hanover Court, Milton Street, to recover 6l. 9s. 7d. from Mr. Isidore Zeifert, trading as the Fitzroy Drug Stores, 2 Charlotte Street, Fitzroy Square, for hair-nets supplied. The defence was that the goods had never been ordered. The plaintiff's traveller said he took the order from the defendant, who made a careful selection of what he wanted and what he thought would be suitable in his business. Dr. T. A. Guinness, a friend of the defendant, who had rooms near by, said he was quite sure no definite order was ever given. The defendant was a Russian and did not understand business. The Judge: Russians understand a great deal. I think he ordered them and he has got to pay. Judgment was given for the plaintiff.

Bankruptcies and Failures.

Re Alfred Charles Williams, described as a Homœopathic Chemist, 65 High Road, Ilford.—Debtor appeared for his public examination at the Chelmsford Bankruptcy Court on August 9, before the Registrar. Questioned by the Official Receiver as to what "The Advanced Homœopathic and Magnapathic Alliance" is, of which he was a member, and the "Incorporated Society of Science," debtor said the latter is a society for gentlemen of science, letters, and art, including homœopathy. He employed various assistants, who sent out circulars and did clerical work. He said he made a profit of about 10½d. out of every 1s. he took. He began his business at Ilford on February 23, 1903. He was educated in the "college of experience." He had never been to any medical school, and he never professed to have any ordinary recognised medical education. He never presumed to be a doctor. His business was almost entirely by correspondence, and by persons visiting him. He compounded the medicines mentioned in the circulars. People came to him after they were tired of doctors,

and chemists had failed. He had served behind a counter as a chemist, and had practical experience of chemistry and drugs. He was an assistant to Dr. Stammers Morrison, of Clapham Road, but was not a qualified chemist. He could read prescriptions and make them up, but he should never attempt to make up such as centained poisons. He had not passed any examination in homeopathy. The examination was adjourned.

adjourned.

Re T. A. WINGFIELD & Co., Lower Broughton, Chemists.—
At the Salford County Court, before Judge Parry, on August 11, Mr. Newman, who appeared for the trustee (Mr. Price) applied that the creditors of Mr. White, a former partner in Wingfield & Co., ehemists, Lower Broughton, should share in the separate estate of Mr. Wingfield. He said that some time in 1904 there was a dissolution of partnership, and it was agreed that the assets and liabilities should te taken by Wingfield, who was to indemnify White. The latter had received a portion of the money, but the balance was still owing. When Wingfield was made bankrupt the Official Receiver rejected the proofs of the creditors of the old joint estate. The result of that would be that if the joint creditors were not allowed to prove, the separate creditors would get 20s, in the pound, but if they were allowed there might be a substantial dividend for all. He submitted that the Official Receiver acted in an improper manner, because he had ro evidence against White. They knew White was absolutely insolvent. Without making him a bankrupt, they had gone as far as they could in that direction. They issued an execution, but there were no effects. They also issued a bankruptcy notice. The Deputy Official Receiver, in reply to the Judge, said he considered the trustee's application a proper one, and Judge Parry granted the application, and allowed the trustee's costs out of the estate.

Re George John Kirkup, 13 Warrington Road, and 9 Westmoreland Road, Newcastle-on-Tyne, Chemist and Druggist.—The resumed examination of this debtor took place at the Newcastle Bankruptcy Court on August 10. In the course of his statement regarding his affairs (particulars of which have been given in The Chemist and Druggist of August 5, p. 263), reference was made to negotiations for the purchase of the business by Taylor's Drug Stores, Ltd., of Leeds. The purchase was net completed, and the intending purchasers were now unsecured creditors for 591l. for money advanced, goods, etc. Mr. Harrison, on behalf of Messrs. Taylor, questioned the debtor as to the balance-sheet which he submitted during the negotiations. The first account showed liabilities of 786l. It transpired, however, that the account did not include the sum of 300l. lent by a sister, and 166l. lent by friends. Debtor said he did not eonsider these sums as trade debts, which was all he was asked to disclose. Mr. Harrison remarked that the second account showed liabilities amounting to 1,426l., so that debtor had not revealed to the intending purchasers of the business, who were going to employ debtor as manager, debts to the extent of 700l. Debtor said he did not think he had deceived them at all. He disclosed all his trade debts, and did not think it was necessary to disclose his private debts, as he had other means of repaying them apart from the business. In reply to the Official Receiver, debtor said that if Taylors had taken the business over a year ago he would not have been in that position. He, however, admitted that the fact that he had not disclosed his true position to Messrs. Taylor had prevented him from compelling them to complete the purchase of the business. At this stage the examination was adiourned.

Re John Melbourne Rees, 8 High Street, Redhill, Surrey, late 2 Southgate Street, Bath, and 6 The Street, Radstock. Somerset, and 76 Norfolk Avenue, Southend, Chemist and Druggist.—The debtor attended for his adjourned public examination on August 16, at the Croydon Bankruptcy Court, before Mr. Registrar Fox. The previous hearing was reported in the C & D., July 8, p. 61. In reply to Mr. Tindal Davis, counsel for the trustee, debtor said that at the time he had tho shop at Bath he had in his employ a gentleman named Fuge. He came into his employ in January 1905, and was paid a salary whilst so engaged. There were no negotiations as to his becoming a partner in the business, but Mr. Fuge paid 400l. for the purchase of the business, subject to certain terms. He denied that he and Mr. Fuge were looking out for fresh businesses in April 1905. The Registrar, interposing, asked the debtor whether he had been required to give information to the trustee on these points, and had done so, and he replied in the affirmative. The Registrar then said he was not bound to go into these matters in a public court. There had been a very full examination on the last occasion, and it was not necessary to go over the whole ground again, and he should not hear an examination unless it was necessary. Considerable discussion took place between counsel and the Registrar as to what were the rights of the trustee under the Bankruptcy Acts, and eventually the Registrar held that information that could be obtained by the trustee from the debtor, in his effice, or by cerrespondence, was not matter for inquiry in

a public court. Debtor, in reply to further questions, said he had only two policies on his life, and these were handed over to the Official Receiver. He had filed a cash and trading account, and had taken the figures from the books in the hands of the trustee, and the payments shown were payments which he had actually made. He had put down an item of 55% for petty cash, and was asked to explain how this was expended, when the Registrar again interposed with the observation that those were matters that could be gone into in the trustee's office, and were not questions for the Court. Counsel then proceeded to examine the debtor with the object of showing that he had made certain fraudulent preferences to creditors when he handed over Bills of Exchange to creditors now returned as partly secured, and he admitted that, although he had previously been sued, he had no knowledge of insolvency at the time. In reply to the Registrar, debtor said that he told the trustee at the first meeting of creditors that he had had an offer of an appointment abroad, but the trustee told him he could not go, but if he did he would be brought back from wherever he went. He had, however, taken the appointment, and had paid a deposit on his passage money. He told the Official Receiver the same thing. That was the whole communication he made to the trustee prior to his arrest under the warrant granted by the Court. In a long discussion that followed between counsel, the trustee, and the person who made the affidavit upon which the warrant of arrest was granted, the Registrar said that he doubted if the whole of the facts had been before him whether he would have made the order for the arrest of the debtor, for the reason, as it now appeared, the debtor was only contemplating leaving the country for a bona-fide appointment, and not for the purposo of avoiding his examination. When he granted the warrant he was led to believe the latter was the case, and but for that he would not have interfered with the liberty of the subject, which was

New Companies & Company News.

DIAMOND FIRE EXTINGUISHER APPLIANCES, LTD.—Registered in Edinburgh. Capital 5,000?., in 1?. shares. Objects: To take over from J. Whaley, manufacturers' agent, of Toronto, Canada, a process for compounding a fire-extinguishing powder with suitable holder, with the right to use and develop the same, and to acquire in the United Kingdom and elsewhere patents for the said process. The subscribers are to appoint the first directors. Qualification, 20 shares. Remuncration as fixed by the company. Registered office, 145 St. Vincent Street, Glasgow.

McCulloch, Ltd.—Capital 1,000?., in 1?. shares. Objects: To acquire the business of a herbalist, manufacturer of herbal beer, medicines, and other compounds, and general dealer, carried on by R. L. McCulloch at 32 Newtown Row, Birmingham, and to carry on the same and the business of manufacturers and vendors of patent medicines, powders, medical sweets, drugs, ctc. The first subscribers are: H. Parker, 28 High Street, Birmingham, estate agent; W. I. Horton, Carlton House, Birmingham, accountant; R. L. McCulloch, Newtown Row, Birmingham, herbalist; J. McCulloch, Newtown Row, Birmingham, assistant brewer; R. L. McCulloch, jun., Newtown Row, Birmingham, herb beer brewer; H. Pullin, 24 Varna Road, Birmingham, surveyor; and W. II. Ireland, 23 Westminster Road, Handsworth, manufacturer. No initial public issue. The first directors are R. L. McCulloch and H. Parker. Registered office, Carlton House, High Street, Birmingham.

NATIONAL PEAT INDUSTRIES, LTD.—Capital 70,000l., in 1l. shares. Objects: To deal in a practical and scientific way with peat and its various products and uses, and with a viewthereto, to acquire (1) the business carried on by the Umeras Moss Litter and Peat Co., in co. Kildare, Dublin, and elsewhere; (2) the business of Scottish Peat Industries, Ltd., with their lease of a large portion of the Lochar Moss in Dumfriesshire; and (3) a controlling interest in Petol, Ltd., by subscribing for 13,000 shares in that company, with various patents and properties appertaining to such businesses, to manufacture, utilise, experiment with, and turn to account peat for the purposes of fuel, moss-litter, millboard, paper and other useful or marketable commodities, and to carry on the business of chemists, druggists, etc. Minimum cash subscription, 21,000l. 37,500 shares are now offered through the medium of a "private" prospectus. The first directors are the Right Hon. Lord Armstrong, Major-General G. De la Poer Beresford, A. C. Kennedy, the Hon. Charles F. Hepburne Scott,

and Sir William H. Stephenson. Qualification, 500%. Secretary and registered office, J. Cockburn, A.C.A., 67 Westgate Road, Newcastle-on-Tyne.

DAVID THOM, DOMEIER & Co.—The capital has been reduced from 160,000% to 85,000%. The directors, who formally resigned, were unanimously re-elected at a meeting on August 10.

GERMAN CHEMICAL-TRADE DEVELOPMENTS.—A scheme was GERMAN CHEMICAL-TRADE DEVELOPMENTS.—A scheme was recently promoted with a view to the complete amalgamation of the Gesellschaft für Chemische Produkte vorm. H. Scheidemandel of Berlin and the Gesellschaft für Chemische Industric of Vienna. Although certain of the shareholders in the former company are largely interested in the latter, the Austrian Government intervened in the matter, and thus frustrated the strength of the Company of the Secretic Product of the Company of the Compa entire absorption by the German company. As, however, it is still considered desirable by the directors of both concerns that on economic grounds an understanding should be arrived at, it has been provisionally arranged to increase the share capital of the German company from 150,000% to 300,000% by the issue of the German company from 150,000%. to 300,000% by the issue of new shares, which are to be exchanged for shares in the Vienna company in the ratio of four of the former for one of the latter. In this way it is expected that the Berlin company will obtain, if not possession of all the shares, at least a majority of two-thirds in the Austrian company. A second scheme relates to the proposed absorption by the Chemische Fabrik Gesellschaft vorm. Moritz Milch & Co., of Rosen, of the undertaking of the Chemische Fabrik Petschow, Davidsohn & Co., of Dantsic. The former, which was established in 1889, now has a share capital of £190,000, and has paid dividends of 11 per cent. each in two years and 12 per cent. each in three years. The Dantsic company, which has a share capital of 45,000%, and a loan debt of 24,000%, has distributed 6 per cent. in four successive years and 7 per cent. in the past 6 per cent. in four successive years and 7 per cent. in the past

WATER-STERILISERS.

Among a number of systems of water-sterilisation exhibited at Millbank Barracks recently were six systems depending upon chemical methods. The following notes about them are from the "Times":

In the first process, that of Schumburg, a bromine solution (bromine, bromide of potassium, and water), contained in glass capsules holding 2 e.c. each, is employed. Each capsule is broken into one litre of water, which, after a period vary-ing from seven to thirty minutes, is treated with a mixture of sodium sulphite and sodium carbonate, which neutralises the

ing from seven to thirty minutes, is treated with a mixture of sodium sulphite and sodium carbonate, which neutralises the bromine and removes its odour in about two minutes. Experiment shows, however, that the water is liable to have a stale taste, and the necessity of carrying about a number of fragile capsules containing liquid is an obvious objection to the use of this method on the field.

The second process, that of Vaillard and Georges, depends on the action of iodine. Three tablets are employed, the first containing iodate of sodium and iodide of potassium with a blue colouring matter, the second tartaric acid with a red colouring matter, and the third hyposulphite of soda. Sterilisation requires ten minutes, and after the process is complete the water has no smell, and presents little, if any, perceptible difference from untreated water.

In the third process (Nesfield's), the water is first treated with bleaching-powder and bicarbonate of soda, and after sterilisation is complete—about ten minutes—sodium sulphite is added to render it free of chlorine and tasteless; this, however, it seems to be difficult to do perfectly.

The fourth process consists simply in the addition of about 15 grains of bisulphate of soda to each pint of water; it was tried in South Africa, but the men objected to the taste imparted to the water (though this can be got rid of by the addition of bicarbonate of soda), and a further objection is that the treated water is found to take up iron from the water-bottles (1.4 grain per gal. in six hours and 3.5 grains in twelve hours! bottles (1.4 grain per gal. in six hours and 3.5 grains in twelve

hours).

The fifth process is the old one of adding permanganate of potash; the pink colour imparted to the water is not liked by

potash; the pink colour imparted to the water is not liked by the men.

The sixth process consists in the use of copper sulphate or chloride. The experiments of Dr. George Moore, of the scientific staff of the United States Government, seem to show that a sulphate-of-copper solution of the strength of 1 in 100,000 is able to kill both typhoid and cholera germs in four or five hours at laboratory temperatures, but from experiments made in this country by Rideal and Barnes it appears that this strength is ineffective, though a 1-in-10,000 solution kills typhoid, though not cholera bacilli, and 1 in 1,000 kills both. In this connection mention may be made of an interesting observation which tends to show that water kept for twenty-four hours in clean copper vessels is freed from bacillus coli and bacillus typhosus; this suggests that the employment of copper water-carts might be advantageous.

A West=end Pharmacy.

WITHIN a stone's throw of the historic pharmacies of Savory & Moore and Dinneford & Co., the handsome shop recently opened in Bond Street by Morny Frères is Architecturally it is much more striking than either of the establishments mentioned, for it is at the corner of New Bond Street and Brook Street, the heart of the fashionable shopping quarter. Moreover, the style of decoration and fitting is much more attractive. It magnetises not only by its originality of style, but by the solid dignified character of the fittings. The main idea in the design for fitting, which has been done entirely—and well done, too by Messrs. S. Maw, Son & Sons, of Aldersgate Street, E.C. is carried through consistently to the minutest detail. Fumed-oak, carved and dull polished, with oxidised silver appointments, sums up probably the materials employed, but it is the good taste displayed in the execution of the design that makes so harmonious a whole.

"It is the Anglicisation of the French style," said Mr. Sydney F. Goss (who practically is Morny Frères) to our representative. "In its entirety the French style would be too frivolous—not dignified enough—for solid high-class English pharmacy."

It was somewhat amusing to listen to Mr. Goss, the erstwhile pioneer of high-class drug-storedom, expounding the theory that the personality of the chemist is really the secret of pharmaceutical success, and that the cutting of prices is foolishness. There are certainly no cut prices with Morny Frères. Quarter-pound packages of Epsom salt sell at probably 9d. or possibly 1s. But the salt is packed in a neat carton, which is again wrapped in fine paper, and neatly labelled and sealed at both ends with a square Morny Frèrcs trade-mark label. Everything is packed and wrapped—and charged for—in the same manner, and Bond Street seems to like it. The bottles are all new shapes, and the labels are particularly noticeable. Plain and severe but distingué, they are all printed in brown lettering; poison-slips the same. The cartons, pill-boxes (which, by the way, are square), powder-boxes, wrapping-paper, sealing-wax, etc., all are brown. This distinguishing colour applies, of course, not only to labels for toilet-articles and proprietaries, but to dispensing-labels as well, to paper, bottle-caps, and twine.



Several photographs of the exterior and interior of the premises have been taken, but none of them gives an adequate idea of the size of the establishment or the elegance of the fittings. The interior which we reproduce is the best of

the series.
"This place," said the original and always courteous Goss, 'is merely an illustration of what Morny Frères are to do in the future. It is the beginning of a big export business. Next year we will open a similar establishment, probably two, in Regent Street. Then a factory will follow, which will manufacture and supply the perfumery, toilet-prepara-tions, and pharmaceuticals of Morny Frères, which by that time, I am confident, will be known the world over.

Thus Mr. Goss discussed his schemes for the future.

Adulteration of Olive Oil.

A S the result of a controversy between two local papers, "Le Petit Var" of Toulon and "L'Eclaireur" of Nice, some very interesting facts have come to light respecting the adulteration of olive oil in the very districts reputed to be the home of this industry. The region of Nice is celebrated for the quality of its oil, and although there is exported annually from this centre something like six million litres, it is a fact that in the town of Nice itself it is comparatively difficult to get an cil which is uncertified. it is comparatively difficult to get an oil which is unsophisticated, and this adulteration, which has been going on for years, culminated last April, when the Syndicate of Grocers brought an action in the Tribunal Correctionnelle de la Seine against certain firms for fraud. The following report from the "Eclaireur de Nice" is of interest to wholesalers and retailers in the United Kingdom. It may be well to mention that the principal centre of adulteration is a small town called Salon, situated between Marseilles and Avignon, at about fifty kilometres from the first-named town, and from here the various adulterated oils are forwarded to all parts of France, and also abroad.

Following is the report from the "Eclaireur":

Following is the report from the "Eclaireur":

It is well known what a struggle our olive-oil merchants have to meet the competition of the disloyal competitors whose headquarters are at Salon. The merchants at Salon try to create a confusion which is prejudicial to our citizens by opening branches, both wholesale and retail, in Nice itself, and by sending out, under the heading of "Olive oil of Nice," oils of inferior quality, which are passed off as oil made in this part of the country. Recently the Courts of Justice condemned a number of oil dealers in Salon who were prosecuted by the Syndicate of French Grocers for supplying olive oil adulterated with seed oils, nut oils, etc. Mons. Cruppi (deputy), to whom the Syndicate of Grocers confided their case, whilst pleading for them was extremely severe in his criticism on the conduct of the Salon oil manufacturers. "The fraud in olive oil," said he, "has its centre, I may almost say its capital, in a charming district called Salon." The eminent lawyer then described the kind of trade in which the majority of the oil merchants were engaged at Salon, and The eminent lawyer then described the kind of trade in which the majority of the oil merchants were engaged at Salon, and the curious sight to be seen at the railway station. On the arrival side of the station were immense waggons loaded up with nut, cotton, and sesame oils, whilst on the other side were thousands of neat little wickered carboys labelled, "This oil is our production from the finest olives." Needless to say, all these carboys contained adulterated oil, and were intended for the public and exportation in general.

The Tribunal of the Seine, in giving its judgment against the authors of this adulteration, concluded as follows:

Any deception in the nature of the article sold, any fraud or any illicit act modifying the normal condition of competition in the olive oil trade, causes a twofold prejudice to the perpetrators, firstly, moral prejudice, caused by the want of confidence which such proceedings produce in the trade itself, and, secondly, material prejudice caused by the inferior position which is forced upon competitors toward the consumer or customer, who is obtained and retained by illicit means. Inasmuch as pure olive oil is worth 180f. (7l. 4s.) per 100 kilos. (2 cwt.), whilst nut oil costs 90f. per 100 kilos. (i.e. just half the price), it is easy to see what a profit a merchant can obtain by blending the two oils and sell for olive oil a mixture of the two. If, however, the producers of oil in the South of France keep their clientèle together by selling their own unadulterated crops of oil, it is producers of oil in the South of France keep their cuentere together by selling their own unadulterated crops of oil, it is equally necessary, in the interest of the public health, to put down all fraud in the manufacture of oil, because these adulterated oils, coming from an oil-producing district, are likely to escape the control which is placed upon middlemen in other towns, and exercised incessantly by the examinations which are made at the Municipal laboratory in Paris.

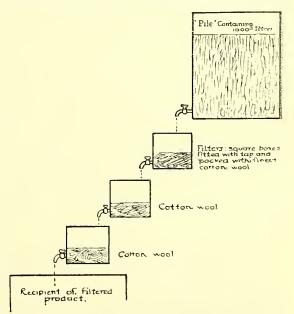
The "Petit Var," a paper circulating in the Salon district did not wish to be accused of taking the part of the oil merchants in Salon, but said the oil merchants at Aix and at Nice and other oil-producing districts do exactly as the Salon people have done, adding: "Very rare are those who sell pure oils—that is, olive oil containing no admixture." To these and other attacks M. Berri, the President of the Society for the Protection of the Oil Trade of Nice, made reply, in the course of which he said :

Fortunately for the trade of Nice we know exactly the amount of seed oil which enters the town. At the request of the olive-oil merchants of our town the different municipalities anxious to protect the reputation of our trade in oil have placed a heavy octroi duty on seed oils. This duty is 12f. 50c. the 100 kilos. (about 5s. a ewt.) and is the heaviest duty that can be levied on this article according to law. We know by the octroi returns the official quantities of seed oils entering tho town of Nice annually. Now these quantities comprise not only edible oils but also oils for burning (colza), linseed, etc., and supposing the town, with its 150,000 inhabitants, does not consume a single litre of it, and would scarcely represent 3 per cent. of the olive oil exported from Nice.

The "Eclaireur" gives an extract of the by-laws, etc., imposed upon the members of the Olive Oil Syndicate of Nice, the more important of which follow:

The merchants forming part of the Syndicate faithful to the traditions of the Nice oil trade are prohibited rigorously, and on their honour, from dealing in any other oil than that of the olive, and consequently from mixing the oils. Any member of the Syndicate convicted of having mixed seed oil with olive oil, or having dealt in seed oils, will be expelled from the Syndicate and fined 10,000f. (400l.); this sum to be added to the funds of the Syndicate. No member of the Syndicate must trade in olive oil under more than one name or style of firm, nor conduct branches, either wholesale or retail, under any assumed name. under any assumed name.

In spite of all the protests there is at Nice a great deal of blending of various qualities of olive oil. Oils arrive in the harbour from various parts of the world. Large quantities come from Algiers and Tunis, from Spain and Italy. These are cheaper qualities, and have distinct characters and tastes, but are used to mix with various qualities of oil produced in the district in order to modify their flavour or appearance, and to diminish the cost. It frequently happens that an old oil perfectly sweet and good is improved by the addition of a young or green oil to pick up its flavour and give it more tone and body. This coupage corresponds to what is done in the wine trade, and is quite legal, although the product resulting from such an operation can scarcely be described as "pure olive oil from Nice," seeing that it is a mixture of Nice oil with cheaper kinds. The blunding of seed oils with olive oil is done before the The blending of seed oils with olive oil is done before the oils have fined down. Both are mixed in a turbid state,



and after remaining in the earthenware vats to clear dow_{D_2} the oil so adulterated is pumped up into the "pile," as it is called, and the product is then filtered through cotton wool in the usual way, the result being an oil of a particularly bright and attractive colour and appearance, but by no means what is generally known as "huile vierge de Nice."

AT Bath, just opposite the gates of the city's largest cemetery, there is an advertisement-hoarding. The uppermost notice proclaims the merits of a particular kind of medicine, the next the address of an undertaker.

Reviews.

The Naked-eye Anatomy of the Human Teeth. By Thos. E. Constant. $8\frac{3}{4} \times 5\frac{1}{2}$. Pp. 194. 7s. 6d. net. John Wright & Co., Bristol.

This book deals with the anatomy of the teeth, tongue, soft palate, jaws, and muscles of the lips and mouth, and is illustrated by fourteen plates and seventy-two diagrams. The subject is handled in a manner which makes the treatise an invaluable text-book for students and those dentists whose anatomical knowledge of the mouth is shaky.

An Introduction to Dermatology. By Norman Walker, M.D. 85×5½. Pp. 280. Forty-nine full-page plates and fifty illustrations in the text. 3rd edition. 9s. 6d. net. John Wright & Co., Bristol.

A capital book on skin-diseases. A description of each eruption, its etiology, diagnosis, prognosis, histo-pathology and treatment is given, interspersed with remarks of the author which indicate expert knowledge of the subject and an acquaintance with the whole range of dermatological literature. Many of the plates are coloured, and thus an opportunity is given of recognising or differentiating such skin-diseases as are rarely met with or present difficulties in diagnosis. Ringworm, eczema, herpes, chilblains, urticaria, acne, psoriasis, erysipelas, and moles are some of the skin-affections dealt with in this book.

The Inventors' Guide to Patent-law and the New Practice. By JAMES ROBERTS, M.A., LL.B., Barrister-at-law. $8\frac{5}{6} \times 5\frac{3}{8}$. Pp. 110. 2s. 6d. net. John Murray, Albemarle Street, W.

ALTHOUGH the book under review is complete in itself, it is founded on the author's larger work on "The Grant and Validity of British Patents for Inventions." We mention this to show that although the book does not contain much over 100 pages it has in a condensed form the chief points in patent-law and is written by an expert. The appendix contains the text of the Patents Act, 1902, and the Patents Rules, 1905; while various references throughout the book show also that the effect of the new practice has been taken into account.

The "Spatula" Soda-water Guide and Book of Formulas for Soda-water Dispensers. By E. F. White. $9\frac{1}{4} \times 6\frac{3}{4}$. Pp. 124. 1\$. Spatula Publishing Company, Boston, Mass.

Contains formulæ for some hundreds of different drinks which are compounded with aërated water from the sodafountain. In addition there are numerous articles dealing with the construction and care of the fountain from which novices and others can glean many hints. The choice of formulæ is very great, and we should think it possible to suit every taste. When the soda dispenser has exhausted his formulary, he will probably derive consolation by re-naming old favourites—names are one of the features of American drinks.

The Optical Dictionary: An Optical and Ophthalmological Glossary of English Terms, Symbols, and Abbreviations, together with the English Equivalents of some French and German Terms Relating to Physical, Physiological, and Pathological Optics, Optical and other Instruments of Precision, and Terms Descriptive of Colour and Photo-chemistry; to which are added a Number of General and Mathematical Expressions. Edited by Chas. Hyatt-Woolf, F.R.S. 8½×5½. Pp. 76. 4s. net. The Gutenberg Press, Ltd., 123-125 Fleet Street, E.C.

The rather lengthy sub-title of this book amply explains the contents. The compiler has done his work well and brought together a useful collection of optical terms, which are printed in a clear type that can be easily read. The last three pages of the Dictionary are taken up with a list of abbreviations used in optics and a pronouncing guide to the Greek alphabet. The definitions, as far as we have checked them, are concisely and correctly expressed.

The Art of Compounding: A Text-book for Students and a Reference-book for Pharmacists at the Prescription-counter. By Wilbur L. Scoville, Ph.G. 3rd ed. $9\frac{1}{4} \times 6\frac{1}{4}$. Pp. 337. 15s. net. Blakiston, Philadelphia; J. K. King & Son, 12 Albert Street, Manchester, agents for Great Britain.

"It has individuality" is what we said when reviewing the first edition of this book some ten years ago. Since then Mr. Scoville has improved the work with each subsequent edition, until it is now practically a dispenser's encyclopædia. In this edition chapters have been added on tablets and on sterilisation and disinfection; while the chapter on emulsions has been re-written, capsules more fully dealt with, and many additions made to the chapter on incompatibilities. At the end of each chapter examples of difficult forms of the particular subject are given. These number altogether over five hundred, and are a feature of the book, the special method of dispensing or reaction involved in each example being pointed out. The new chapter on tablets is very well done, the manipulative difficulties and methods of overcoming them being fully dealt with. In common with the practice adopted in other parts of the book, only a very few words are devoted to tablet-making machinery. Information on this subject has to be sought in works on pharmacy. This necessarily makes the book incomplete, but the omission has doubtless been rendered for fear of increasing the size of an already bulky volume. Mr. Scoville's book fills a similar part as a text-book of dispensing in the United States to what the "Art of Dispensing" does in this country.

The Practical Grocer. Vol. IV. By W. H. SIMMONDS. 10½×6¾. Pp. 272+Index. 7s. 6d. Gresham Publishing Co.

This, presumably the last volume of an excellent series, is the most interesting, pharmaceutically considered. For it comprises the "oils, wines, and sidelines" of the grocery trade, and the "sidelines" trench, as all the world knows, on pharmacy. The book is, however, as we have noted in previous volumes, carefully and accurately compiled, and there is nothing contained in this volume with its concise chapter on "Drugs, Medicines, etc.," to which the broadminded pharmacist can take exception. The grocer who essays pharmaceutical proprietaries and drugs as a sideline is plainly warned at every convenient opportunity where he may overstep the border-line of unqualified trading. Thus under "Oilshop Sundries":

With reference to articles containing any of the poisons scheduled in the Pharmacy Acts, it is important to observe that these cannot be sold retail except by duly qualified chemists, and must be labelled "Poison."

Again under "Drugs, Medicines, etc.," the reader is told:

To begin with, we have (1) drugs that are scheduled poisons; these the grocer is not allowed to sell at all. (2) Drugs that are dutiable as patent medicines; these must bear stamps, and a licence is required for every shop at which they are sold. (3) Drugs that are saleable without stamps or licence by registered chemists, under certain conditions. (4) Drugs and articles of a similar nature that are saleable without stamps or licence by grocers or anybody else.

In this chapter the provisions of the Pharmacy Acts are succinctly set forth. The illegality of the sale of poisonous "patents" is emphasised, and there is a lengthy exposition of the Medicine Stamp Acts embracing recent decisions, with many noticeable points culled (with due acknowledgment) from The Chemists' And Druggists' Diary. These points are all, of course, familiar to the alert pharmacist who reads his Chemist and Druggist carefully; but there are many other chapters in this volume that will interest him. Particularly may be mentioned those dealing with "Oils," "Waxes," and "Soaps." Each has been written by an expert, and the amount of information on the various subjects that has been condensed into each is praiseworthy. The full-page illustrations include a coloured reproduction of the laboratory at the Vinolia Co.'s works, and the outside of the Commercial Sale-rooms in Mincing Lane. The portraits are mainly magnates in grocery, but there are likewise Mr. Jeremiah Colman, of the celebrated mustard firm, and Mr. Thomas W. McMullan, of Thomas McMullan & Co., wholesale druggists, Belfast.

A fungus Disease of Young fruit=trees.

By Peter Fenton.

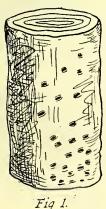
TUNGI are a source of great annoyance to the gardener. There is one that attacks fruit trees, called Eutypella Prunastri. It plays great havoc with them. Young fruit-trees up to the age of eight years are most liable to the disease, and as the stem is the part usually attacked, the girdling of this portion of the plant by the fungus growing in the bark and cambium means the death of the entire tree. Plum and apple trees suffer most severely from this parasite.

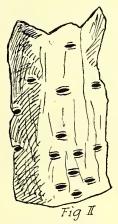
The fungus is also often very abundant on wild plum and blackthorn, and it is the spores produced on such wild trees that infect cultivated ones. Peach and cherry trees are less

liable to attacks.

The first indication of the presence of the disease is the premature yellowing and fall of the leaves, followed by a drying-up, browning, and shrivelling of the bark of the stem. During the spring numerous minute, elongated cracks, arranged usually in clusters, appear in the dried-up bark. These represent the first form of fruit produced by the fungus, and are followed during the second season after infection by larger and more irregularly scattered transverse cracks in the now dead bark, as seen in figs. 1 and 2.

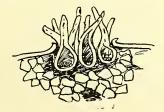
The spores of the fungus are mature at the beginning of summer, and it is at this season that infection of young trees takes place. The spores gain access either through the living bark itself or through the ends of pruned twigs. All freshly exposed surfaces should be coated with gas-tar to prevent the spores from entering. Should this precau-





tion be neglected, spores frequently alight on the freshly formed wounds and germinate, spreading upward and downward in the living bark. Soon after this the fungus bursts through the bark it has killed, and produces spores as seen in fig. 3.

It has been observed that this disease is very prevalent if the trees are growing in hard clay and if deeply planted.



F19 II

Water collects around the roots and prevents free access of air, thus rendering the trees susceptible to the attacks of parasitic fungi.

In order to prevent the spores from germinating on the

surface of the stem, then entering through the bark, the whole tree should be smeared over with an alkali preparation. The following is an excellent preparation:

Soft soap, strong solution of washing-soda. Reduce the soap to the consistency of paint with the soda solution. Then add 16 oz. of quicklime to every 5 gals. of the mixture.

Apply to the trees with a brush.

This mixture is not easily removed by rain, and usually lasts for a season if properly applied. The country chemist will find this a very good paying line if pushed.

If the disease has gone too far, the plants should be burned at once, as, if allowed to lie about, the spores mature on the dead wood, and are scattered by the wind, probably to infect other trees.

All mosses and lichens attacking fruit-trees can be removed with this paint, or with a solution of caustic soda.

Association Ballads.

THE PURPOSE.

The men, their aims, their daily irk;
Their troubles, triuls, thoughts, and views
On things politic, foes that lurk
In friendly guise, but treach'rous work—
These be the burden of our Muse.

LXIX. YARMOUTH.

[A musical critic unkindly hints that the following lines suggest the old Scottish ballad "Caller Herrin'."]

Sing ho! for Harvey Palmer, Our eaptain he and tempest-charmer; Ho! for Captain Palmer Who dwells by mouth o' Yare.

When pharmacy like wayward motor, Plunging, shrieking, yells for naught; or When the local pilule-coater Jibs at haunts of native bloater, Taetful Harvey Palmer Prescribes for them a method calmer; There's no resisting Palmer Who dwells by mouth o' Yare.

Though Councillors may squirm and squabble, Deep in legislation dabble.
Pleasing an unthinking rabble,
Riehmond winks at Poll and Drabble,
Sends for Harvey Palmer
And, glowing as his speech grows warmer,
"None," say they, "like Palmer
Who dwells by mouth o' Yare."

Now Hill and Male are eke as hearty, Keenly watching Bloomsbury Party, Smile at Robinson, at Carteighe. "Bill," say they, "is weak and warty; Riehmond, Poll, and Palmer Would soothe the seedsman and the farmer; Dobbs would quail at Palmer Who dwells by mouth o' Yare."

When Privy Councils we defy 'em, M.P.s' eloven hooves espy 'em, Yarmouth men put such things by 'em: Hickley Broad and Potter Heigham Give more joy to Palmer, And Shearman, Woodcock eke are calmer Picnicking with Palmer Near by the mouth o' Yare,

Cause and Effect.—In the amusing daily causerie in the "Morning Leader" entitled "Sub Rosa," the following occurred recently:

Though wine and orthodoxy seem to flourish in Jerez, the city is viewed with pity by the American Commercial Agent because the ingenious products of his great country are not to be found there. In dwelling on its forlorn condition in this respect, the writer expresses himself a little unfortunately, saying: "There are small drug-stores, but they do not keep the many valuable patent medicines for sale in the United States. There are no hearses in this city." An unkind reader might see in this an illustration of cause and effect. The absence of the patent medicine does away with the necessity of a hearse.



TO CORRESPONDENTS .- Please write clearly and concisely on one side of the paper only. All communications should be accompanied by the names and addresses of the writers. If queries are submitted, each should be written on a separate piece of paper. We do not reply to queries by post, and can only answer on subjects of general interest.

Unprofitable Patents.

Sir,—Allow me to assure "Alert" that I do not lose many customers. When "Eno"—as he instances—is asked for, a polite answer is made that we do not stock it, but instead a 1s. saline (Allen & Hanburys) is brought before the notice of the customer, beautifully put up and a sound preparation in every way. And now allow me to ask "Alert" a question, the force of which will appeal to us all. If he, as he writes, stocks every available patent, profitable or unprofitable, does he not find on stocktaking days an everincreasing array of unsaleable patents? Does he not find that hundreds of pounds' worth of these goods are lying on his shelves, many of them upon which he is bound to lose money, even after selling; and does he not find that after balancing up he is considerably out of pocket through stocking unprofitable goods; and, lastly, can he look upon all this with equanimity, and try to make himself believe that he does this thing simply to prevent a few of his customers from going to the stores for an $11\frac{1}{2}d$. There are people who will go to the stores, no 113d.? There are people who will go to the stores, no matter what counter-inducements are offered, and with these I do not cavil. They have a perfect right to go where they choose. Many of them come back to me for their drugs and medicines, and some of my best dispensing customers are stores people. My calculations have been carefully made, and I find that as long as my dispensing charges are based on reasonable lines, and as long as my drugs and sundries are turned out fresh and clean, and also at reasonable prices, I have no cause to fear the permanent loss of an odd customer, and I am surrounded with co-operative stores, cutting grocers, and the limited companies. What I maintain is, that if we go to the trouble of educating ourselves as chemists we should take not only the fullest advantage of that education in our business, but, what is more, we cease to be honest to ourselves when we allow any firm to use our names, our windows, and our walls to further the sales of their nostrums which we retail out at cut-throat prices. Is it not a fact that Neave's costs 7s. 6d. and sells at T_2^*d . Bates' costs 7s. 6d. and sells for 8d. Benbow's costs 19s. and sells for 1s. $7\frac{1}{2}d$., Condy's costs 10s. 4d. and sells for $10\frac{1}{2}d$., Cuticura soap 9s. 2d. and sells for $9\frac{1}{2}d$., the ointment 22s. and sells for 1s. $10\frac{1}{2}d$., Resolvent 24s. 10d. and sells at 2s. 1d., Davis's pills 8s. 10d. and sells at 9d., Lamplough 22s, and sells at 1s. $10\frac{1}{2}d$., Whelpton's 8s. 5d. and sells at 9d.? Add these to last week's lot take the average sales of natents on these to last week's lot, take the average sales of patents on a turnover of 200*l*. per week, which "Alert" is in receipt of (and one shop alone), and then let him ask himself the question, How much am I losing through stocking this lot? The labourer is worthy of his hire, and as long as I pay big rents, rates, and taxes, and place qualified men behind my counters, so long shall I demand a fair profit on whatever patents I handle, and chemists as a body can either end or mend this state of things as soon as they like if they will but wake up.

Yours sincerely,

AWAKE. (38/23.)

Sir.—The "cutting with a vengeance" mentioned in the C. & D., August 5, has certainly been beaten in Reading. An enterprising chemist has been supplying a 5d, tablet of soap on such purchases as Seigel's at $11\frac{1}{2}d$. Williams' Pink Pills at 1s. 11d., Doan's at 1s. 11d., Eno's at 1s. $9\frac{1}{2}d$., etc. I have, in person and by the aid of assistants and friends, obtain, in person and supply of each purchase transfer transfer. tained a good supply of soap, and, unfortunately for my patent-medicine house, done them out of a few scraps. This insane cutting must do both wholesalers and retailers out of a legitimate profit and it is a pity that some sort of combine cannot be formed to boycott these unprotected proprietaries. Yours,

P.A.T.A. MEMBER. (38/54.)

The Minor.

Sir,—I am sure that many unfortunate Minor students will read with pleasure Mr. John Wishart's letter in last week's C. & D., p. 322, about the pharmaceutical student's education. Pharmacy students will agree that the Minor examination ought to be divided or conducted in stages. Such a course would give every student a chance of passing his examination without the trying experience of having to pass so many subjects at one examination—the strain of which is certainly injurious to a candidate's health—especially those who have long shop hours. Why not divide the examination, with a fee of 57.5s. for each day? A student who passed the first day ought not to face the practical portion of the examination again in the event of failure in his second day's work. Many students have been compelled to abandon the trade owing to the hardships of the present system of examination. In my own case I commenced study in 1896, and still remain unqualified owing to the severity of This statement I am not afraid to admit the examination. as I have always been a conscientious worker.

Faithfully yours, MINOR CANDIDATE. (38/30.)

The Practice of Pharmacy in Glasgow.

SIR,-Now that things have somewhat cooled down after the raid of the Pharmaceutical Society on the doctors' shops in Glasgow, or, rather, on their assistants, it may be well to inquire whether the Glasgow faculty of physicians and surgeons have not equal and certainly prior rights of control over the practice of pharmacy in that city to the Pharmaceutical Society.

In Dr. Duncan's "Annals of the Faculty" various charters are set forth which successive Scottish kings granted to the faculty, from the somewhat nebulous document given to the

From these it is evident, first, that the word "Pharmacien," which has usually been assumed to be quite a modern assumption from the French, was used in the charters of the faculty at least two hundred years ago; and in the second place, that the regulation of the practice of pharmacy, equally with that of surgery, in Glasgow and its vicinity was the monopoly of the faculty, who had the power to license such persons as they thought fit.

So far as I can make out, those powers, though somewhat modified by the Medical Acts, have never been abrogated as regards pharmacy, and the faculty can declare any persons whom it may think fit qualified to practise pharmacy in Glasgow quite as well as the Pharmaceutical Society.

The only reason why it has not hitherto asserted its rights is that it is rather averse to doctors keeping shops; still there Yours truly, is no doubt those rights exist.

A FELLOW OF THE FACULTY OF Physicians and Surgeons.

Veterinary Information.

S1R,—In reply to your correspondent, J. Ward (C. & D., August 5, p. 270), the lump beneath the skin of the bullock's jaw found to be filled with hair was a congenital cyst of the dermoid class, very frequently seen in cattle, which arose from the accidental inclusion of a portion of the epiblast, the most superficial of the three layers of the germinal membrane (blastoderm), which latter, in the very earliest stages of embryonic development, divides into three distinct layers. From the epiblast is developed the cuticular covering of the body, with the hairs and glands of the skin, as well as other important structures. Without necessarily discussing in detail the various foldings of the three layers of the primary germinal membrane (blastoderm), I will mention that the situation named by your correspondent as the seat of the tumour is one of the most usual parts in which such cysts are found. The walls of superficial dermoid cysts present all the structures of true skin, and consequently hair follicles and hair, and these tumours, with their contents, sometimes develop to a very astonishing extent. I may add that tumours containing various structures, such as bone, teeth, cartilage, etc., are found in man and animals; but, while not due to inclusion of a portion of the above-mentioned embryonic membrane, they can be readily accounted for and explained, but are, however, none the less astonishing to the lay mind.

St. Patrick's Place, Cork.

Yours faithfully,
E. WHITLEY ALLSOM. ing to the lay mind. St. Patrick's Place, Cork.

Dispensing Notes.

A Phenol Mixture.

SIR,—After the following prescription is dispensed, on being allowed to stand a day or two, it gives off an offensive odour somewhat like carbon-disulphide. Can you tell me Yours truly, W. S. CLARK.

Gly. ac. carbol. ... mxv. Ac. hydrochlor. dil. Glycerin. mxv. • • • ••• зj. Aq. chlorof. ad ... ъij. Mitte 3iv.

A dessertspoonful in half a wineglass of water twice a day, after meals.

[Reaction between the phenol, chloroform, and hydrochloric acid accounts for this, the odour being due to some phenol derivative.]

Magnesium Sulphate in Mixtures.

We recently received from a correspondent three specimens of a mixture prepared according to the subjoined prescription:

> Acid. hydrocyanic. dil. Sodii bicarb. Magnes. sulphat. 5ij. ... • • • ъij. Syr. rhœados Aq. menth. pip. ad ...

The specimens had been made with different samples of syrup of red poppies, and the question submitted was which was correct. This we duly replied to, but we return to the prescription as an interesting point is involved about the precipitation of magnesium carbonate. We may say that at present, after standing a month, the mixtures have the following characters: ing characters:

I. Pale sherry colour, with a slight and almost colourless powdery deposit.

II. Dark-brown mixture, of slightly black appearance, clear, with a black powdery precipitate. [This is similar to a mixture which we made with genuine syr. rheados.]

III. Slightly pink or ficsh-colour, with hard white crystalline precipitate of magnesium carbonate.

First, in regard to the change of colour, we observed that none should take place if the mixture contain not more than 30 gr. of magnesium sulphate and 10 gr. of sodium bicarbonate to each ounce, especially so if tap-water be used in the place of distilled, because the carbon dioxide contained in the place of distilled, because the carbon dioxide contained in the water ensures that the magnesium carbonate formed by the interaction of the products is retained in solution as magnesium bicarbonate, at least for a considerable time, when the bottle is kept well closed. Curiously, this is an example in which a departure from the prescribed system of always using distilled water oan be made with a useful chemical and pharmacourisal result. Another example of this may be given: maccutical result. Another example of this may be given:

Ammonii carbonatis 3iss. Magnesii sulphatis ... Tr. belladonnæ ... Tr. nucis vomicæ ... Siss. 5ij. ... Tr. zingiberis Tr. zingiberis ... Spt. chloroformi 5iv. ... 5iv. ... Aq. menth. pip. ad 3xij.

Dispensed with tap-water this remains clear a considerable and convenient time, whereas with distilled water it commences to deposit almost at once, and becomes an impossible mixture after a few days. The reaction which takes place between magnesium sulphate and alkaline bicarbonates is not thought of sufficiently by prescribers or corrected by dispensers, and has caused many a bottle to burst and the patient's confidence to be shaken. The following equations approximately show the change which takes place:

MgSO.+2NaHCO.-NgH.(CO.)

 $MgSO_4 + 2NaHCO_3 = MgH_2(CO_3)_2 + Na_2SO_4$

 $MgH_2(CO_3)_2 + H_2O = MgCO_3 + 2H_2O + CO_2$

In such cases ordinary aërated water is even better than tap-water for keeping the mixture clear. We recognise, however, that the use of distilled water only for dispensing purposes is the only safe rule to go upon, and the above case is a mere ex-ception. An excellent example of the unexpected changes which may occur when tap-water is used is this mixture:

Potassii iodidi ... gr. v. Liquor. arsenicalis mv. ... mv. Liquor. potassæ • • • ... Tr. serpentariæ ... 385. Aquam ad īss.

The day after this was dispensed with London tap-water crystals appeared on the sides of the bottle, and increased in size each day. On examination they were found to be calcium carbonate, the source of which was the exceptionally hard

water which Londoners are supplied with. This fact once more shows how difficult it is to make a dispensing rule which should apply generally. There are many provincial water-supplies with which no such precipitation could take place, and we daresay the Loch Katrine water is for dispensing-purposes better than much of the distilled water sold at 3d, per gal at 3d. per gal.

Miscellaneous Inquiries.

We endeavour to reply promptly and practically to trade questions of general interest, but cannot guarantee insertion of replies on a particular date, nor can we repeat information given during the past twelve months.

H. G. (37/29).—Your letter is hardly fair criticism, as you say nothing about the value of board and lodging, for which alone some part-time students are content to work as long as they have ample time for study.

G. G. D. (38/18).—The letter you send is both personal and libellous.

Dispenser (243/23).—We have no formula for a liniment such as you suggest, but try adding acid. salicylic. 3ss. to lin. belladonnæ 3j.

Benjamin (225/42).—Orange-flower water contains several micro-organisms which in the summer months play havoe with organic ingredients in mixtures by promoting fermentation. This is at the bottom of your difficulty. You should boil the water before using it.

Information Wanted.

Inquiries for the names and addresses of manufacturers, or other trade information, not traceable by reference to the advertise-ment-pages of "The Chemist and Druggist" and the "C. & D. Diary," or not filed in our private register, are inserted here free of charge. Postcard or other replies to any of the subjoined inquiries (addressed to the Editor "The Chemist and Druggist," 42 Cannon Street, London, E.C.), will be esteemed.

40/58. Makers of dried yeast.

41/21. Makers of ox-gall soap.

Who are the makers of "Provac"? 37/59.

37/58. Who are the makers or agents for "Urosanol"?

36/44. Name of firm in Billingsgate who sell ray-skins.

39/73. Who are the suppliers of Symes & Paget's knives and Dr. Pagenstacher's thread?

38/50. What is the composition of "pil. aletris co., Sumner," or who are the makers?

Thew Books.

These notes do not necessarily exclude subsequent reviews of the works. Any of these books printed in Great Britain can be supplied, at the published price, to readers of this journal on application (with remittance) to the Publisher of "The Chemist and Druggist," 42 Cannon Street, London, E.C.

Lee, A. B. *Microtomist's Vade-Mecum*. Handbook of methods of microscopic anatomy. Sixth ed. $9\frac{1}{8} \times 5\frac{5}{8}$. Pp. 548. 15s. net. (Churchill.)

Merillat, L. A. Animal Dentistry and Diseases of the Mouth. 9½×6. Pp. 262. 12s. 6d. net. (Baillière.)

Perfumery in Corfu.—France supplied the island of Corfu with 19 tons of perfumery last year, a decrease of one ton on the previous year.

Among the imports into Cophalonia last year were 2,0001. worth of drugs and medicines, 1,1751. worth sulphate of copper,

worth of drugs and medicines, 1,175t. worth sulphate of copper, 2,300t. worth soap and perfumes, and 300t. worth soda ash.

"Pharmaceutical Formulas."—L. S. S. (32/22) writes: "I am in receipt of the new volume of 'Pharm. Formulas.' A hasty glance through it shows it to be a great improvement on its predecessors. Without doubt it is the very best book of recipes in the English language."

CHILIAN HONEY AND BEESWAX.—The exports from Talcahuano last year were 77,925 kilos. of honey to the United Kingdom, 161.430 kilos. to Germany, 34,723 kilos. to France, and 22,000 kilos. to Belgium; the exports of beeswax were 18,558 kilos. to the United Kingdom, 30,246 kilos. to Germany, and 649 kilos. to France.

Consular Counsel.

DENMARK.

According to the report for 1904 by H.M. Consul at Copenhagen the manufacture of spirit for industrial purposes from peat is a new industry in Denmark. It is said that it is possible in this way to obtain a very cheap supply for power, light, and heat. If the experiments, tests, etc., are correct, the production is expected to be large and profitable.

GERMANY.

In his annual report on the trade of the Grand Duchy of Baden for 1904 the British Consul at Mannheim states that "favoured by legislation and the support of the Government the Alcohol Trust not only made their monopoly yet more absolute, but by clever management, backed by a partial failure of the potato crop, were able to carry spirits to a record price. Nevertheless it can hardly be regarded as permanent, since the higher price of alcohol tends to enhance the cost of reductions. the cost of production of many articles, and must tell in the long run." A reduction in price has already taken place, as has been noted in these columns, and with every prospect of a good potato crop in Germany this season there should be a further reduction in prices.

NORTH FORMOSA.

The amount of camphor exported from the ports of North Formosa (Tamsui and Kelung) during 1904 shows an increase in value of over 9,000l. as compared with 1903, an increase in value of over 9,000%, as compared with 1905, while camphor oil, which is exported solely to Japan, has increased by 24,000%. About 50 per cent. camphor is extracted from this oil, of which 30 per cent. is retained for local consumption in Japan, the rest being exported as Formosan camphor. From January 1 to December 31, 1904, the exports of camphor were 41,319 piculs, of which Europe received 24,818 piculs, U.S.A. 11,563 piculs, India 4.379 piculs. Hong-Kong 430 piculs. and Kobe 129 piculs. 4,379 piculs, Hong-Kong 430 piculs, and Kobe 129 piculs. The sale of opium, which is a Government monopoly in Formosa, appears to be on the increase, as the number of persons, of which 14,721 are females. Value of the imports last year for North Formosa (Tamsui and Kelung) amounted to 298,5701., or 2,640 chests, of which 1,400 were Persian.

HAMBURG.

Consul-General Sir William Ward finds that the trade of Hamburg with the United Kingdom last year was equal to nearly 20 per cent. of the value of the aggregate trade of the port, whilst the total value of the trade between Hamburg and all parts of the British Empire was equal to about 35 per cent. More than half of the entire trade between Germany and the United Kingdom is carried on through Hamburg. Though there was an increase in 1904 of about 170,000%, in the total value of goods imported from the United Kingdom. from the United Kingdom as compared with the preceding year, some prominent articles of import showed a more or less considerable falling-off. The trade of Hamburg with the Dominion of Canada, which represents about half of the trade carried on between the Dominion and all parts of the German Empire, naturally continued last year to be unfavourably affected by the tariff war between the two countries, the total value of last year's trade having declined to about one-half of what it was two years ago. The Consul has practically nothing to say about the drug and chemical trade, contenting himself with a few observations on spices, olive oil, indigo, nitrate, honey, and beeswax. The total imports of the latter product reached nearly 29,400 cwt., as against 21,720 cwt. in 1903. It may be noted that the imports of beeswax to Hamburg from German East Africa show a remarkable increase for from German East Africa show a remarkable increase for 1904, the same having been 2,960 cwt., as against only 530 cwt. in the preceding year. The consumption of Carnauba wax further increased in Germany last year, the imports having reached 29,400 cwt., as against only 19,400 cwt. in 1903. The total imports of foreign honey to Hamburg last year, owing to the very small Chilian crop, were about 15 per cent. less than in 1903, and prices, which stood very low at the beginning of last year, consequently experienced a gradual rise. The German honey-crop was likewise again small in quantity. likewise again small in quantity.

Commercial Motes.

Mexican Sarsaparilla.

Some of the drug-importers in New York are considerably disturbed over the recent action of the Customs authorities in holding up large consignments of Mexican sarsaparilla-root. Everybody knows that the Mexican variety is a cheap grade, but it has been coming into the port for years, and it is thought that the Customs authorities are a little dilatory in taking so arbitrary a stand. Sarsaparilla is used for a wide variety of purposes, and in some instances the conditions are such that a chear price must be placed on the conditions are such that a cheap price must be placed on the crude drug. The Customs officers declare, however, that they mean to bar the inferior Mexican drug in the future.

The Bromide War.

It was recently stated that the German producers of potassium bromide and bromide preparations, as represented by the syndicate, propose to dictate their own terms on the conclusion of the price war now prevailing between themselves and the American manufacturers, the first condition being the possession of the Canadian market, and the second a greater share in the business in the United States. This comprehensive claim has evoked a reply on behalf of the American interests, who point out that if the demand were acceded to, there would be little or nothing left for themselves. At present the American manufacturers turn out a larger quantity of bromide preparations, and particularly bromide of potash, than American manufacturers turn out a larger quantity of bro-mide preparations, and particularly bromide of potash, than it is possible to dispose of in the inland market, and it was this excess in the output which they endeavoured to sell in Germany. The price of bromide of potash in the latter country was formerly 2s. $4\frac{1}{2}d$. per lb., but it has now receded to 1s. 3d. The American interests state that their competition in Germany was rendered perceptible just at the time when sharp rivalry among the Teutons themselves had reduced the inland price to 1s. 3d. per lb. Then the Germans became aggressive in the United States market, where they find com-petition at the present moment to be an expensive matter. Thus, instead of 1s. 3d. per lb., as in the native market, German rivalry in New York has depressed the price to $7\frac{1}{2}d$. As the import duty amounts to $2\frac{3}{4}d$. per lb. and the expenses of sale to 1d. per lb., the actual yield to the Germans can only be $3\frac{3}{4}d$. per lb., which does not cover the cost of production, and in these circumstances the Americans wonder how long the Germans will be willing to continue a contest which largely the Germans will be willing to continue a contest which largely results in loss.

Indian Government Quinine.

In reviewing the report on the administration of the Cinchona Department during the last official year, the Government express their satisfaction on the results attained by Mr. W. M. Standen, the Director. The introduction of the new system of selling pice-packets of quinine of 7 grains each have system of selling pice-packets of quinine of 7 grains each has been a great success, the extra work thrown on the department notwithstanding. The financial results were satisfactory, though the cost of production increased. The quantities of quinine and febrifuge sold increased again. The factory machinery was examined by an expert, and various additions and improvements have been sanctioned. The result, it is expected, will improve the outturn of quinine—which, in the year of report, from over five lakhs of lbs. of bark was 12,920 lbs., or 306,720 oz. The total cost of manufactured quinine rose, owing to the fact that bark purchased from private growers yielded a smaller outturn than usual. The future productiveness of the plantations appears to be well assured, for the old plantations were vigorously re-stocked, as many as three-quarter million plants raised from selected seed having been added to the nurseries during the year.

A New Vegetable Oil.

A New Vegetable Oil.

Recently a leading West African merchant in Liverpool received, amongst a miscellaneous consignment of native products, a parcel of what appeared to be melon seeds. They were sent to the newly established Institute of Tropical Research in connection with Liverpool University, where, on investigation, it was found that the seeds, which were the produce of a Lagos gourd, were largely oleagiuous, and capable of yielding an oil eminently suitable for human consumption, while the residue was pronounced to be a highly nutritious cattle food. Whether the seed could be imported in sufficient quantities as to be commercially profitable has yet to be proved, but the prospects are such that trial shipments are being made. Chemical analysis has demonstrated ments are being mado. Chemical analysis has demonstrated that both oil and meal are free from any poisonous or deleterious substance which might render them harmful for use as foodstuffs. It has been determined that the seeds are moderately rich in an easily extractable clean, sweet oil of a bright replacement of silver characteristics. bright yellow colour, the percentage of oil being about 45 per cent., compared with from 53 to 57 per cent. in the richest source of vegetable oil at present known.

Trade Report.

NOTICE TO BUYERS .- The prices given in this section are those obtained by importers or manufacturers for bulk quanti-ties or original packages. To these prices various charges have to be added, whereby values are in many instances greatly augmented before wholesale dealers stock the goods. Qualities of drugs and oils vary greatly, and higher prices are commanded by selected qualities even in bulk quantities. It would be unreasonable for retail buyers to expect to get small quantities at anything like the prices here quoted.

42 Cannon Street, London, E.C., August 17.

T the auctions of first-hand drugs a fair proportion of A offerings was disposed of, but prices on the whole tended lower. Senna was the chief feature, over a thousand bales of Tinnevelly leaf selling at lower prices. Cape aloes were dull of sale and easier. Curação were about steady, fine being dearer. Sumatra benzoin sold steadily, but the offerings of cardamoms were infinitesimal. Ceylon cocaleaves found eager buyers, but fine dragon's-blood receded somewhat. Jamaica honey sold cheaply, and for Rio ipecac. steady prices were paid. Menthol on forced sales dropped 1s. 6d. on the private rates, but for H.G.H. peppermint oil steady rates ruled. Rhubarb was quiet but steady, and for native Jamaica sarsaparilla a slight advance was paid. Beeswax was firm generally, especially for Jamaica. Outside of the drug auctions a trifle more activity is reported in various quarters, but it cannot be said that the markets are active. Consequent on the advance in opium manufacturers of morphine have advanced their prices. Makers of santonin have also advanced their quotations as expected. Quinine is about $\frac{1}{4}d$. dearer in second-hands, but only small sales are recorded. Cod-liver oil is rising in Norway, but buyers here do not respond. Citric and tartaric acids and cream of tartar are all quiet, little new business being reported. Ergot is a strong market and is likely to go higher. The principal changes of the week are as below:

Higher	Firmer	Easier	Lower
Aloes, Curação (fine) Ergot Morphinesalts Oil, eod-liver Oil, palm Santonin Sarsaparilla (native)	Senega Quinine (sec. hands) Wax, Japan	Acid, earbolie Cinchona Dragon's- blood	Aloes, Cape Honey (Jam.) Menthol Nux vomiea Senna (Tinn.)

Cablegrams.

Hamburg, August 17: - Ergot is advancing. Lycopodium is lower at 570m. per 100 kilos., and cod-liver cil is firmer.

New YORK, August 17:—Market is quiet. Opium is strong and advancing; \$3.17 per lb. is to-day's price for druggists' in case lots. Peppermint oil is dull of sale and weak at \$2.25 per lb. for tin oil. Menthol is rather firmer at \$2.35 per lb., and Norwegian cod-liver oil has advanced to \$28.00 per barrel. Mexican sarsaparilla is firm at 11c. per lb., and Western senega of new crop is steady at 62c. per lb., Curação aloes being quoted at 5c. per lb. in boxes. Ceylon citronella oil is firm at 34c. per lb., and for round buchuleaves 14c. per lb. is asked, market being easy.

Heavy Chemicals.

The general condition of the heavy-chemical market continues to be much the same as lately reported, and there is a steady all-round demand on both home and export account without any particular stress. Values all round are steady at, for the most part, unaltered figures.

ALKALI-PRODUCE.—Inquiries continue to eome in for forward delivery, but so far no very great amount of business has actually been concluded. Bleaching-powder is very steady at 41. 12s. 6d. to 41. 17s. 6d. per ton. Ammonia alkali, soda crystals, and other main products are in average request.

SULPHATE OF AMMONIA, although nominally unchanged from figures last mentioned, is steadier in tone, position at Leith and Hull especially being firmer.

Green Copperas continues to move steadily on both home and export account. Best Lancashire makes 37s. 6d. to 40s. per ton, f.o.b. Liverpool, and Welsh 11s. to 12s. in bulk free on

SULPHOCYANIDES are dull and without improvement either as regards demand or values. Potassium, $7\frac{1}{4}d$. to $7\frac{1}{2}d$.; ammonium, 95 per cent., $6\frac{1}{4}d$. to $6\frac{3}{6}d$.; barium, 95 per cent., $3\frac{1}{2}d$.

Tinc Salts are in about average request at late rates. Zinc sulphate erystals, 6l. to 6l. 5s. per ton, and zine ehloride solution, 100° Tw., 6l. 5s. to 6l. 10s.

Calcium Chloride is moving rather better than of late at

from 50s. to 55s. per ton, free on rails or f.o.b.

SATINITE is in better demand again, and late figures of 55s. to 60s. per ton, free on rails or f.o.b., are well maintained.

RECOVERED SULPHUR.—Steady at 51. 5s. to 51. 10s. per ton, free on rails, in bags.

German Drug-market.

Hamburg, August 15.

Business is very quiet, and there is only little doing in drugs

ANISEED.—Russian is firm at 44m. per 100 kilos.

ANTIMONY is firm at 70m. per 100 kilos.

CAMPHOR (REFINED) is very quiet, and prices favour buyers; spot is offering at 610m. per 100 kilos.

CARNAUBA WAX is dull, and tending lower; grey is quoted 238m. per 100 kilos.

CARAWAY-SEED is improving at 54m. per 100 kilos. CITRIC ACID is firmer at 258m. per 100 kilos. Excor is firm, with an improving demand, at 320m. to 325m. per 100 kilos.

per 100 kilos.

Lycopodium is deelining; spot is quoted 620m. to 610m., and forward delivery 550m. per 100 kilos.

MENTHOL is quiet on the spot at 17½m. per kilo., and forward is offering lower.

GOLDEN SEAL.—Canadian is quiet at 12¾m. per kilo.

IFECACUANHA is unchanged; Rio, as well as Cartagena, is queeted 114m per kilo.

quoted 11½m. per kilo.

JAPANESE WAX is firmer at 108m. per 100 kilos.

STAR-ANISEED is steady at 148m. per 100 kilos. SPERMACETI is firm at 250m. per 100 kilos

WORMSEED is firmer at 120m. per 100 kilos.

OLS (FIXED).—Castor is improving; first-pressing in barrels on the spot is 48m. per 100 kilos. Cod-liver oil is firm at 80m. to 82m. per barrel for non-eongealing oil. Chinese wood oil for spot delivery is very firm at 66m. per 100 kilos., and for August-September shipment 56m. per 100 kilos.

OLS (ESSENTIAL).—Peppermint is quiet; H.G.H. is quoted 15\frac{1}{4}m. per lb., and Japanese at 9\frac{3}{4}m. per kilo. Star-anisced oil is firm at 10\frac{3}{2}m. per kilo.

oil is firm at 103m. per kilo.

ACID, CITRIC, is firm, and unaltered at 1s. 4d. to 1s. 5d. for English and 1s. 3d. for foreign.

ACID, TARTARIC.—Steady, the demand mostly applying to deliveries off contract. English is $11\frac{1}{4}d$. and foreign $10\frac{3}{4}d$. per lb.

Arrowroot.—The sales include 1,100 barrels of St. Vincent, at from $1\frac{5}{8}d$. to $1\frac{3}{4}d$. per lb.

Camphor.—Some holders have lately accepted 2s. 4d. per lb. for Japanese tablets of $\frac{1}{6}$, $\frac{1}{2}$, and 1 oz. sizes, but this week 2s. 5d. to 2s. 6d. has been paid, and the latter figure may now be taken as the price.

CANTHARIDES.—New Russian are quoted 4s. 3d. per lb., c.i.f., by 2-cwt. lots.

Chamomiles.—Steady. According to those who have visited the Belgian producing districts the crop has turned out a fair average one. By the end of the week it is expected first pickings will have come to an end, so that some deterioration in quality is looked for. Prices of first pickings range from 68s. to 75s. per cwt., c.i.f., according to quality and holder. France has lately been buying moderate quantities in Belgium.

ERGOT is a strong and advancing market, owing to there being very few offers of new crop from Spain and Russia. Prices on the spot vary considerably, according to idea of holder; Russian has been sold at 1s. 9d., and even 2s. is quoted in one direction; for old Spanish 18. 6½d., c.i.f., has been paid. It is quite likely we shall see still higher prices, as the reports of the crop in both Spain and Russia continue of a doleful character, added to which Hamburg has been sold in fair quantity for October delivery.

CINCHONA.—At the monthly auctions on Tuesday the moderate quantity of 1,191 packages was offered, of which 916 packages sold at barely steady prices, the average unit being 1d. per lb., against $1_{16}^{-1}d$. at the last Amsterdam sale.

The following table shows the quantities of bark offered and

			Packages Offered	Packa; Solo	
East Indian cinchona				which 650	
South American cinchona		•••	178	,, 62	
African cinchona	•••	•••	120	,, 120	
Java cinchona	•••	•••	84	,, 84	
			1 101	-07.0	
			1.191	916	

The following were the approximate quantities of bark purchased by the principal buyers:

J paragraphic and and a	Lbs.
Messrs. Howards & Sons, Ltd	70,649
The Imperial Quinine Co	41,733
Agents for the Frankfort and Stuttgart fac-	· ·
tories	32,51 5
Agents for the American and Italian factories	21,180
Agents for the Brunswick factory	10,636
Agents for the Mannheim and Amsterdam fac-	,
tories	
Druggists, etc	24,854
Total quantity sold	201,567
Bought in or withdrawn	55,050
m . 1	
Total quantity offered	256,617

The prices paid were as follows: EAST INDIAN Officinalis, ordinary stem chips and shavings $1\frac{\pi}{6}d$. to $2\frac{\pi}{3}d$. ordinary to fair renewed $1\frac{\pi}{6}d$. to $4\frac{1}{4}d$., original stem chips and shavings, good, 6d., branch $1\frac{\pi}{6}d$. to $2\frac{\pi}{3}d$., and root $2\frac{1}{2}d$. to $4\frac{1}{4}d$. Ordinary to good Succirubra natural stem chips and shavings 2d. to $4\frac{\pi}{6}d$., branch $1\frac{\pi}{3}d$., and root $2\frac{1}{4}d$. to 5d. per lb. Ledgeriana stem chips at $2\frac{\pi}{6}d$. Apyrid $1\frac{1}{2}d$. to 3d., and root $2\frac{1}{4}d$. Java Ledgeriana original stem chips $8\frac{\pi}{6}d$., Ledgeriana branch $6\frac{\pi}{6}d$. And root $6\frac{\pi}{4}d$. Hybrid root $6\frac{\pi}{4}d$., stem chips 5d., and branch $4\frac{\pi}{4}d$. per lb. African.—Fair red quill $4\frac{\pi}{4}d$. to $4\frac{\pi}{6}d$. and broken quill and chips 4d. South American Bolivian cultivated Calisaya quill $4\frac{\pi}{4}d$. to $5\frac{\pi}{4}d$. good flat sound $10\frac{\pi}{4}d$. per lb. Seven bales Red sold at $3\frac{\pi}{4}d$. subject for chips and 83 bales of Columbian and Cuprea were bought in at from 2d. to 3d. per lb.

to 3d. per lb. David Howard called attention to a point of some importance in regard to the present system of sampling bark adopted by the London brokers, which, he urged, was unsatisfactory. His experience had shown that the analyses of samples of His experience had shown that the analyses of samples of bark from the same parcel were often at variance, sometimes the discrepancy being 2 per cent. to 4 per cent., and he had known a glaring instance of a difference of 30 per cent. between two samples. He therefore suggested that they should adopt the Dutch system of sampling bark, which had worked satisfactorily for a good many years, and, as it was a perfectly safe one, it would confer an immense advantage to buyers all round. Asked by Mr. Urwick, of Messrs. S. Figgis & Co. (who occupied the rostrum), what the difference between the two systems was, Mr. Howard explained the Dutch method, adding that if the samples showed a considerable variation it could be readily assumed the analysis was wrong, and not the sample. Mr. Urwick said that London was becoming of less and less importance as a bark market, but, nevertheless, he sample. Mr. Urwick said that London was becoming of less and less importance as a bark market, but, nevertheless, he was sure importers and brokers would only be too anxious to sample their barks fairly and adequately, as accuracy of analysis was the most important point. He promised to bring the matter before his brother brokers. Mr. W. W. Green, too, thought there would be no difficulty in falling in with the views of the trade, and Mr. F. Graf also drew attention to the old grievance of damaged cinchona being offered for sale without having been declared unsound by the private wharfingers, adding that several wharves habitually made no returns whatever. Mr. Urwick promised to give attention to the matter.

At the Amsterdam auction on August 24, 9,679 bales and 450 cases, weighing 904,138 kilos. and containing 45,361 kilos. of quinine sulphate, will be offered. The manufacturing-bark contains an average of 5.32 per cent. quinine sulphate. The auctions will also include 8 cases (400 kilos.) of cinchona alkaloids, and 24 bales Java coca-leaves. In the drug-auction 7 serons of Huanuço quill sold at 73d., and 4 bales Loxa quill at 10d. for sound; flat yellow bark was held at 10d. The shipments from Java for the first half of August amount to 591,000 Amsterdam lbs.

MORPHINE.—A further advance of 3d. per oz. has taken

place in morphine salts, the manufacturers' prices being as under:

	_	100-oz. Contracts	250-oz. Contracts
Morphine acetate oz. ,, hydrochlor. cryst. ,, hydrochlor. pulv. ,, meconate ,, pur. cryst ,, pur. precip , sulphate cryst. ,, sulphate pulv. ,, tartrate ,	s. d. 0 2 5 5 5 5 6 6 6 5 5 6 6 6 5 5 6 6	s. d. 4 11 5 1 4 11 6 2 6 4 6 2 5 1 4 11 6 2	$\begin{array}{c} s. d. \\ 4 10 \\ 5 0 \\ 4 10 \\ 6 0\frac{1}{2} \\ 6 0\frac{1}{2} \\ 5 0 \\ 4 10 \\ 6 0\frac{1}{2} \end{array}$

The above prices are per oz., net, and no falling clause.

OIL, ANISEED, STAR.—For arrival prices are lower, business having been done at 4s. $4\frac{1}{2}d$. per lb., c.i.f. Mail advices dated Hong-Kong. July 14, state there has been a lively demand, especially for $13\frac{1}{2}^{\circ}$ congealing point. Good brands are quoted 4s. 6d. to 4s. $6\frac{1}{2}d$., c.i.f.

Cassia.—Mail advices from Hong-Kong dated July 14 state there is a good inquiry, and prices are firm with small stocks at 2s. 103d. for 80 per cent. to 85 per cent. c.a., 2s. 9d. for 75 per cent. to 80 per cent., and 2s. $7\frac{1}{4}d$. for 70 per cent. to 75 per cent. c.a.

OIL, CASTOR .- Prices of French oil are now the highest that have ruled for many months, importers quoting water white at 31s. per cwt. for cases and 28s. 6d. in barrels. Hull make for prompt delivery is 24l. 5s. per ton for firsts; September delivery, 211. 5s. per ton for seconds; September-December deliveries, firsts 24l. 10s. per ton; October-December deliveries, seconds 221. per ton, delivered free ex wharf, London.

OIL, COD-LIVER.—Several agents here have had instructions to raise their prices owing to the fact that the market in Norway has been advancing and is much above the parity of the London market. Practically nothing is now obtainable at 85s., agents quoting from 90s. to 95s. per barrel. Our Bergen correspondent writes on August 14 that the advancing tendency still prevails. Stocks appear lighter than supposed and also the lack of the "raw" cod-oils for medisupposed and also the lack of the "raw" cod-oils for medicinal purposes may have contributed to the firmness of the market. Finest non-congealing cod-liver oil is to-day quoted at 84s. per barrel, f.o.b. Bergen, and many holders demand still higher prices. The exports from Bergen up to date amount to 6,747 barrels against 4,313 barrels at the corresponding date of last year. From all Norway the exports up to date may not be far from 20,000 barrels, whereas the total production of steam-refined cod-liver oil was this the total production of steam-refined cod-liver oil was this year about 36,000 barrels.

OIL, LIME.—Good West Indian distilled oil is somewhat scarce at 1s. 9d., and for hand-pressed, of which the first-hand market has been practically cleared, 3s. 6d. is wanted.

OIL, OLIVE.—Advices from the producing districts in Spain fully confirm our previous information in regard to unfavourable prospects of the next season's olive-oil crop, so that prices all round show a rising tendency

OPIUM.—Our correspondents write as follows:

SMYRNA, August 4.—The sales this week amount to 201 cases,

SMYRNA, August 4.—The sales this week amount to 201 cases, including 160 usual run Karahissar t.q. and 12 new current t.q. for the United States, 23 cases usual run Karahissar t.q. for speculation, and six cases selected Karahissar for France. The need of money for stocktaking by interior dealers keeps prices down, but after this week's purchases we expect an advance. Market closes very firm.

SMYRNA, August 5.—The market is active, with the following important transactions: Six cases old choice Karahissar t.q. at the equivalent of 9s. 1d., 181 cases Karahissar t.q. at 8s. 11d., and 12 cases new current t.q. at 7s. 11d. per lb., c.i.f. European ports; 23 cases of the above were for local speculators. The market closes firm with buyers, and the arrivals in Smyrna to date amount to 404 cases, against 2,075 cases at the same time last year. The quality of the new opium, on which same time last year. The quality of the new opium, on which an allowance of 3 per cent. is given, continues to leave much to be desired, this explaining the difference in price between the old and the new gum.

QUILLAIA.—The exports from Talcahuano during 1904 were 113,315 kilos. to the United Kingdom, 235,000 kilos. to

Germany, 29,303 kilos. to France, 65,810 kilos. to U.S.A., and 3,530 kilos. to Peru.

QUININE is firmer in second-hands, although still very quiet. A few inquiries from the United States have been on the market for some weeks past for cheap parcels, but there is a difficulty in filling such orders as holders now quote $9\frac{1}{4}d$. for good brands of German sulphate from second-hands, and small sales have been made at this price within the last day or two. Market closes firmer $9\frac{3}{6}d$. buyers.

Santonin.—An advance of 1s. 6d. per lb. was announced by makers on Wednesday, and present prices are now as follows: less than 28 lbs. 31s. 9d., 28 lbs. 31s. 6d., 56 lbs. 31s. 3d., 1 cwt. 31s. per lb. net.

SHELLAC.—The delivery market last week closed 5s. lower, the sales including 200 cases TN for October at 174s., but subsequently sellers asked 177s. for this position, and this price was paid for 100 cases on Tuesday, the market afterwards advancing to 180s., which was paid for 300 cases for October and December. On the spot, market has been quiet with small sales of TN at from 177s. 6d. to 180s. per cwt., according to quality, but the tone at the close is much brisker. 500 cases selling to-day.

SPICES.—Moderate supplies were offered at auction, for which a slow demand was experienced. Of Ginger 298 bags and 10 cases Cochin and Calicut were offered, and all bought in, comprising bold but wormy and scraped at 65s.; washed rough, dull medium, and small rather wormy at 22s., and D rough rather lean at 18s. 100 bags Japan were offered and bought in at 18s. No Singapore Pepper was offered at auction. Of 218 bags Aleppy 175 sold at steady rates, fair heavy at 5\frac{5}{6}d. Privately the market is unchanged, little business having occurred. On the spot fair Singapore quoted 5\frac{7}{6}d. value. At auction 20 cases White Pepper and 60 bags Singapore offered and bought in, fine (in cases) at 1s., and good at 9\frac{1}{2}d.; 34 bags Ceylon offered and sold, good at 8\frac{1}{2}d., fair at 7\frac{7}{6}d. to 8d. Privately the demand continues unimportant. On the spot fair Singapore is quoted 8\frac{1}{6}d., and fair Penang 8d. For arrival Singapore August-October shipment quoted 8\frac{1}{16}d. value, c. f. and i., delivered weight. Pimento was not represented in auction, and privately the market is quiet at 2\frac{1}{2}d. for fair. Nutmegs and Mace were steady. In auction 296 bales of Zanzibar Cloves offered, of which 236 sold, including fair at 5\frac{5}{6}d. Privately 300 bales sold, fair to good Zanzibar 5\frac{1}{6}d. Privately 300 bales sold, fair to good Zanzibar 5\frac{1}{6}d. Good large red Japanese Chillies were bought in at 35s., and 17 bags Spanish Capsicums sold at 55s. for large picked red.

STROPHANTHUS.—Genuine $Komb\acute{e}$ can be now had at 4s. 3d. per lb.

TURPENTINE.—The following interesting exports are from a British Consular report on the trade of Savannah:—

Port	1902	1903	1904
Savannah(gals.) Brunswick (casks) Wilmington (casks) Wilmington (brls. crude)	12,352,333	12,000,000	3,577,294
	71,186	32,528	26,691
	19,021	16,476	17,700
	23,842	26,845	33,673

London Drug Auctions.

The following table shows the quantity of drugs offered and sold:

Of	fered	Sold	
Agar-agar	11	. 0	C inella
Ajowan-seed	2	. 2	Cannab
Aloes—			Cardam
Cape	58	. 7	Cascara
Curação	43	. 43	Cashew
Zanzibar	19	. 19	Cinchor
Annatto-seed	4	. 0	Coca-lea
Antimony (Jap.)	34	. *34	Condur
Balsam Tolu	24	. 0	Cuttle-f
Benzoin—			Dill-see
Saigon	2	. 2	Divi-div
Sumatra	106	. 67	Dragon'
Bird-lime (Jap.)	25	. 0	Elemi
Buchu	12	. 1	Galls

Off	ered	S	old
C mella alba	10 .		0
Cannabis indica	18 .		1
Cardamoms	30 .		16
Cascara sagrada	190 .		190
Cashew nuts	12 .		0
Cinchona	50 .		18
Coca-leaves	17.		17
Condurango	7.		0
Cuttle-fish bone	100 .		0
Dill-seed	50 .		50
Divi-divi	59 .		59
Dragon's-blood	27 .		5
Elemi	10 .		0
Galls	2.		2

Offered Sold Offered Sold			
Gamboge 7 0		ris 5 5	
Guaiacum 8 4		tchouli-leaves 70 9	
Gentian 70 0		atany 14 0	
Honey-		ubarb	
Jamaiea 83 64		Chinese 66 11	
Ipecacuanha—		rsaparilla 14 7	
Cartagena 1 0		ablac 57 0	
Minas 3 0			
		nna (Tinne-	
Rio (Matto Grosso) 14 10	C-1	velly)1011 962	
Jalap 26 0		uarri-nuts 5 5	
Kamala 6 0	So	y 25 0	
Kola 28 28		icklac 15 7	
Lime-juice 27 8		marinds—	
Manna 1 0		W.I 58 58	
Menthol 20 5		ax (bees')—	
Myrrh 25 0	1	Australian 5 0	
Nux vomica 142 88	(Cape 14 14	
Oil—	1	East Indian 29 0	
clove 2 0		[talian 4 4	
cod-liver 5 *5		Jamaica 21 18	
cinnamon 5 0		Madagascar 27 2	
citronella 25 0	Ī		
lemongrass 25 0		Morocco	
peppermint—		Zanzibar 248 5	
H.G.H 20 20		1X—	
		Japanese 50 0	
Olibanum 10 10 * Sold		doary-root 40 0	

* Sold privately.

ALGES.—Cape was 1s. to 2s. lower, 7 cases selling at 25s. for good bright hard, 23s. for fair, softish and dull, and 20s. 6d. for ordinary dull and soft, and loose collected at 18s. per cwt. Another lot of 51 cases was offered, but buyers could not be persuaded into making reasonable bids. A parcel of Curaçao aloes sold at considerably dearer prices for fine liver, 50s. per cwt. being paid for 2 cases; good liver sold at 34s. to 35s., fair at 28s., dull liver at 23s. to 26s., bright capey 21s. to 24s., capey turning livery 24s., dull livery and capey mixed 20s., and strainings 15s. per cwt. Nineteen cases of Zanzibar aloes sold without reserve at from 2s. 6d. to 3s. per cwt. for very common liquid in tins and cases.

Antimony.—The 34 cases Japanese crude offered had been sold privately.

Benzoin.—Steady, and in demand. A pile of 21 cases Sumatra sold without reserve at 7l. per cwt. for good almondy seconds; 20 cases of good fair sold at from 6l. 12s. 6d. to 6l. 15s.; middling sold at 5l. 10s., and for thirds 95s. per cwt. was paid. Two cases of common dark Saigon garblings sold without reserve at 52s. per cwt.

Buchu.—An odd bale of fair round greenish stalky sold at 5d. per lb., and for a further 10 bales 6d. was wanted. Good green longs were held at 1s.

Cannabis Indica.—Genuine tops from Bombay were limited at 4s. and siftings at 3s. per lb., a case of very stalky tops from Zanzibar selling at 2s. 4d. per lb. without reserve.

Cardamoms.—The supply offered was exceptionally small and insufficient to test market values. Ceylon Mysores, good bold pale long and round mixed 1s. 4d., medium pale round 11d., small pale $8\frac{1}{2}d$. to 9d., small specky 7d.. common brown and split 6d., seed 10d. per lb.

CASCARA SAGRADA.—A lot of over 190 bags, weighing over 5½ tons, one-year-old bark, in long but dull quills, sold without reserve at 27s. per cwt.

Coca-leaves.—Ceylon met with good competition, nine cases of good greenish Ceylon selling at 1s. 3d. per lb., and for 8 packages of brownish leaf 11d. to 1s. was paid.

Cuttle-bone in large supply and neglected; 3d. per lb. was wanted for bold soft palish bone.

DILL-SEED.—Steady, 52 bags East Indian selling at from $13s.\ 3d.$ to $13s.\ 6d.$ per cwt.

Divi Divi from Madras sold at 68. 9d. per cwt.

Dragon's-blood.—Rather lower. Of ten cases good reboiled lump offered four cases sold cheeply at 81. 10s., the remaining five cases being bought in at 91.

Gamboge.—Good bright Siam pipe, slightly damp, was bought in at 151. 10s.

Gualacum.—Fair, rather drossy block sold cheaply at $5\frac{1}{2}d$. per lb.

Honey.—Jamaica sold cheaply, good bright amber liquid in casks realising 23s. 6d., fair bright at 19s., and darkish at 16s. A pile of 46 packages of common dark brown liquid were disposed of at 16s. to 16s. 6d. per cwt. Three casks dark brown thick sold at 17s. per cwt.

IPECACUANHA.—Rio sold at steady prices, from 5s. 1d. to 5s. 2d. per lb. being paid for six bales of ordinary to fair lean, 5s. 3d. for fair stout, and 4s. 9d. to 4s. 11d. for seadamaged. Good bright quality was not offered. Three bales of fair native-picked Minas were bought in.

JALAP.—For a parcel of small to bold part very wormy tuber $4\frac{7}{8}d$. per lb. was wanted, the resin-content according to Umney's analysis being 10.6 per cent.

Kamala.—A new parcel partly consisting of good red was bought in at 10d. per lb.

Kola.—Twenty-eight packages of African lying in Liverpool sold at $2\frac{3}{4}d$. per lb. for small dull part wormy.

Lime-juice.—Eight puncheons of common raw Jamaica

sold at from 3d. to 8d. per gal. without reserve.

Ментног.—Lower. Five cases Yazawa (unworked) were bought in at 8s. 6d. per lb., and 5 cases Kobayashi slightly blocky and partly off colour crystals sold without reserve at from 6s. 6d. to 7s. 1d. per lb.

NUX VOMICA.—Good small to bold bright silky from Malabar (88 bags) were taken at 8s. 6d. per cwt., and for 36 bags of good bold pale 13s. was wanted.

OIL, LEMONGRASS, from Tuticorin, was held at 81/2d. per oz.

OIL, PEPPERMINT.—Twenty cases of American H.G.H. sold without reserve at 12s. 6d. per lb., which is considered a fair price. Previous to the auction it was possible to buy American H.G.H. at 12s. 9d. per lb. London terms.

OLIBANUM.—Pickings (four cases) sold without reserve at 23s. 6d., and siftings at 15s. 6d. per cwt.

ORRIS.—Five bags sea-damaged Florentine sold without reserve, for account of whom it may concern, at from 8s. to 17s. per cwt.

Rhubarb.—Quiet. Three cases medium to bold round the remaining 23 cases of this pile were bought in at 10d., and for five cases small to bold flat High-dried with half pale pinky, half grey and dark fracture, 1s. 2d. was wanted. Two cases of bold to very bold flat Shensi, with three-quarters good pinky break, sold at 1s. 11d., which figure was also paid for two cases of medium; small flat ditto with nice break had been sold privately, and for two cases good pickings (round and flat) 1s. 5d. was paid. Arrivals of rhubarb have been freer of late, especially High-dried and Canton.

Sarsaparilla.—No grey Jamaica was offered. Fair Lima-Jamaica (4 bales) realised 1s. 1d. per lb.; 5 serons Honduras were limited at 1s. 3d.; and for 3 bales Native 10d. was paid for fair reddish to dull, being 1d. dearer.

SENEGA.—For shipment new crop is quoted 2s. $7\frac{1}{2}d$. per lb., c.i.f., and on the spot small sales have been made at 2s. 9d. net.

Senna was about the only feature of interest, owing to the considerable quantity of Tinnevelly leaf offered. In fact we do not suppose that so large quantities of the new crop have ever been offered before in August, and this taken in conjunction with the large, if not almost record, crop of last year, which enabled both home and American buyers to purchase heavily, accounts for the lower prices which were accepted at to-day's sale. Common leaf, which at the commencement of last season realised 2d. to $2\frac{1}{4}d$., sold to-day at $1\frac{1}{4}d$. per lb.; the bulk of the offerings consisted of this description. A few boldish to bold leaves were offered, and these were strongly competed for, up to $3\frac{1}{2}d$. per lb. being paid, and for one lot of nice green colour $5\frac{1}{4}d$. per lb. was paid. Pods were unchanged at 1d. to $1\frac{1}{4}d$.

Souarri Nuts.—Five barrels from Demerara sold at 10s. per cwt.

STICKLAC.—Good clean free from stick was held at 150s., and for 7 bags small woody from Madras 65s. was paid.

TAMARINDS.—Fair fresh Antigua of new crop, in bond, realised from 13s. to 13s. 6d. per cwt.

Wax, Bees'.—Jamaica sold firm prices, 7l. 15s. per cwt. being paid for 4 packages good bright pale yellow, and for

a further 14 packages from 7l. 12s. 6d. to 7l. 17s. 6d. was paid for dark to good. A case of good pale yellow to dark Antigua sold at 7l., and for four bags of good red Italian 7l. subject was paid. Good bright Cape sold readily, 14 packages being taken at 7l. 5s. per cwt. A string of 141 bales Zanzibar was held at 7l. for fine pale even brown, and for Zanzidar was neid at th. for the pate even brown, and for 2 cases of good pale 7l. was paid, and 6l. 12s. 6d. subject for 3 blocks of dark brown. Pale brown to dark, part slightly drossy, Madagascar, was limited at 7l.; good pipe at 7l. also, and for dark wormy a bid of 6l. 12s. 6d. is to be submitted, and for 2 bags of fair, yellow Mozambique, 6l. 15s. was paid. Australian was held at 7l. 5s., and dull bleached Calcutta at 7l. 7s. 6d.

WAX, JAPANESE.—Privately business has been done for August-September shipment at 52s, 6d., c.i.f., but 55s, 6d. is now asked for September-October shipment. On the spot holders now ask 55s., an advance of 2s. 6d.

Arrivals.

is now asked for September-October shipment. On the spot holders now ask 55s., an advance of 2s. 6d.

Arrivals.

The following are among the arrivals of drugs and chemicals at the principal U.K. ports from July 27 to August 2, inclusive; Acid, acetic (@ Rotterdam), 14; acid, carpolic, xtals, 34 dms.; acid, citric (@ Bordeaux), 57; annatto seed (@ Madras), 4; antimony (@ Shanghai), 446 cs.; argol (@ Bordeaux), 191; arsenic (@ Oporto), 162; benzoin (@ Singapore), 103 cs.; bleaching-powder (@ Tréport), 12; camphor (@ Havre), 275 cs.; cardamoms, (@ Colombo) 41, (@ Bombay) 15 cs., (@ Madras) 15; cinchona, (@ Cartagena) 88, (@ Lisbon) 60; colocynth (@ Persia), 12; coriander, (@ Coconada) 149, (@ Bombay) 200; cumin-seed (@ Mazgan), 100; dragon's blood (@ Singapore), 17; fenugreek-seed (@ Bombay), 167 bgs.; galls (@ Persia), 127; gamboge (@ Singapore), 7 cs.; gentian, (@ Marscilles) 20, (@ Santander) 65; ginger, (@ Jamaica) 49, (@ Bombay) 122; gum arabic (@ Bombay), 100; honey (@ Jamaica), 17; insect-powder (@ Trieste), 32; lime-juice (@ Dominica), 82; liquorice (@ Busreh), 30 bls.; menthol, (@ Yokohama) 10 in tr., (@ Kobe) 10; nux vomica, (@ Cochin) 106, (@ Marscilles) 170; oil, camphor, (@ Kobe) 0c., (@ Havre) 100; oil, castor (@ Antwrep), 24 brls; oil, lemongrass (@ Calicut), 4; oil, peppermint (@ Havre), 10 cs.; cils, essential, (@ Hong Kong) 10 cs., (@ Messina) 57; opium (@ Marscilles), 24; phosphorus (@ Montreal), 135 cs.; potash chlorate (@ Gothemburg), 50; quillaia (@ Hamburg), 156; soda crystals (@ Terneuzen), 320; rhubarb (@ Shanghai), 60 cs.; sandalwood (@ Madras), 77; sandara (@ Mogador), 86; sovy (@ Hong Kong), 100; sulphur (@ Catania), 1,366 pkgs.; tartar (@ Bordeaux), 150; vanilla (@ Ceylon), 7 cs.; wax, bees', (@ Mogador) 11, (@ Jamaica) 15; wax, carnauba (@ Hamburg), 35 the principal ports of the United Kingdom from August 3 to 9: Acid, acetic (@ Fredikstad), 139; aloes (@ Mossel Bay), 20; aniseed (@ Konigsberg), 35; arsenic (@ Oporto), 20; benzoin (@ Penang), 10; egg yolk (@ W C. Africa), 21; ginger (

THE exports of glycerin from Barcelona during 1904 amounted to 1,027 tons, against 1,853 tons and 2,991 tons in 1903 and 1902 respectively.

Rolling Stones in Pharmacy.

By ONE OF THEM.

A N ancient saying tells us that "A rolling stone gathers no moss" but in contradiction to this another says "Experience teaches all things"; and since experience is the open sesame of many good posts in pharmacy it would seem that the chemist's assistant, by becoming the much abused "rolling stone" in following the teaching of the latter proverb, will disprove the theory of the former by gathering abundant moss of experience. To that stay-at-home assistant who never gets, or seems to desire to get, beyond the narrow circle of his own acquaintance, a few words on the life of a chemist's assistant in Baluchistan may not prove altogether uninteresting and may be the means of developing in him a desire to travel and see things for himself.

From the beginning of my career in pharmacy I have been constantly on the move. Commencing my apprenticeship in the North of Scotland, the third year found me in the North of England in the capacity of improver. My post being one of the one-horse variety, I was left a good deal to myself, and was consequently compelled to rely considerably on my own resources, thereby stimulating and developing confidence in myself-circumstances which I think are in every way beneficial to the embryo pharmacist. After about eighteen months I began to feel that I had gained all the experience I was likely to get in that situation, so I looked for pastures new. In a short time I had transported myself and my thirst for knowledge to Liverpool, where I gained wide experience and good training. The business was quick cash retail coupled with fairly good dispensing. I remained there three years almost, when once again the nomadic spirit took possession of me. This time the desire was to get into a store for the matter of six months or so and gain a store experience. Some chemists, who in the twentieth century would like to impress their juniors with an eighteenth-century conception of pharmacy, will no doubt pooh-pooh the idea of any gain accruing from such a change, and urge their juniors by all means to avoid the stores. "Once the stores, always the stores" they will say with gravity sufficient to put a judge to shame; but I utterly fail to see any reason in that notion. To the young assistant, desirous of gaining that all-round experience so much in demand, I urge six months in a quick cash store business as a means towards that end. As London seemed to offer the widest field for store experience, to London I went. The change was not in vain, though I had to work long hours and hard. While thus engaged I came to the conclusion that I had seen most sides of the business of a chemist and druggist as followed in England, and a vacancy occurring out here in India I applied for it and was successful. Here, indeed, were pastures new. The stone was about to roll once again. It would be strange indeed if, at a distance of 8,000 miles from home, a stranger in a strange land amongst a stranger people, I did not find something entirely new, see pharmacy in an entirely new aspect, and, generally speaking, "bring grist to my mill." Surely I would not

Come out By the same door as in I went.

Accordingly, leaving all my friends behind me, I took the initial step on this new path of my life by sailing from Tilbury. At eight in the morning of the fifth day out we reached Gibraltar, where we were allowed to go ashore for four hours. From the Bay the Rock certainly looks very stern and imposing. In the town itself, which consists practically of one street, things seemed to move rather slowly. The native shops have a tempting array of curios of all kinds. I went into a chemist's, and here I found that same spirit of take-things-easy prevailing. One thing which impressed me not a little was the large stock of B. W. & Co.'s goods displayed. Our next port of call was Marseilles, and I found it to be a most interesting place, the wide streets with their shady boulevards and high buildings on either side forming a striking contrast to London streets. The voyage from Marseilles to Port Said was a perfect pleasure trip. We passed through the Strait of Messina at night when, for our especial benefit, Stromboli flared up twice,

shooting a great tongue of flame up into the air, and with the surrounding darkness as a background the mountain formed a magnificent sight. The less said about Port Said the better. With the Suez Canal I was very much disappointed; a narrow strip of water with nothing but sand, sand, sand on each side as far as the eye could reach. A melancholy place indeed. At Aden we were not permitted to go ashore, nor were we in the least degree sorry, for a more uninviting spot it would be difficult to find, looking for all the world like a huge cinder. From Aden to Bombay we experienced rather rough weather, as the monsoons had just commenced, but by far the worst part of my sea journey had yet to come; that from Bombay to Karachi. This was done in a comparatively small local steamer. I remained all night at Karachi, but having to proceed by train for upcountry early the next morning I had no opportunity of seeing round the place. The railway journey from Karachi I have no desire to again perform for some time to come, at any rate during the summer. The heat was positively unbearable. From 10 A.M. to 4 P.M. the thermometer remained steadily between 100° and 110° F. inside the railway carriage. Added to this I made the not by any means welcome acquaintance of mosquitos and sandflies, who paid me marked attention.

Now, away up here in the hills of Baluchistan, I have once more come to rest for a spell. We are situated in a long valley with rugged, barren, sun-parched mountains encircling us. Climate all that can be desired, a little dry and hot in the summer, but in the winter beautifully brisk and bracing. It may seem odd to people at home if I say we have plenty of snow in the winter, but they must consider that, though in India, we are situated

7,000 feet above sea-level.

As to pharmacy here, unless one is prepared to turn his hand to many things other than drugs, to the selling of side-lines not generally considered to be chemists' sidelines at home, he had better stay at home than venture forth as a chemist's assistant in this land of everlasting sunshine. For the business of a chemist and druggist in Baluchistan comprises much more than the title indicates. Some little description of the external appearance of the pharmacy may not be out of place. It forms a striking contrast to the usual shop front at home, where every attention is given to having an attractive window. Here we have no window at all—that is to say, no window for the display of goods. On each side of the door we have a dome-shaped stained-glass window to light the shop. The front consists of a series of arches like what at home we call a piazza. Opposite to the centre arch is the door or main entrance, where in place of the usual glass door of many home pharmacies a native-made matting hangs suspended, which most effectively serves the double purpose of keeping the dust out and letting any breeze in. The interior is of square formation. At the back, in front of you as you enter, is the dispensing department; on the right are cases with the usual array of well-known patent medicines; at one end of these is a B. W. & Co.'s case with a display of their goods; while at the other end is an equally attractive display of P. D. & Co.'s speciali-On the left is another row of cases containing stationery, sundries, cigars, cigarettes, etc. The front of the dispensing counter forms cases displaying perfumes, toilet-requisites, and native and English silver goods, while about the floor are displayed artists' materials, sparklets, and sundry articles. Passing through the shop to the back we come to the godowns, or stock-rooms. Here, also, we have a large mineral-water factory, where we turn out several hundred dozen different kinds of waters daily.

As to the hours of business, we are not much better off than at home. The shop is opened at 7.30 A.M. and closed at 7.30 P.M., with two hours off for meals. Saturday afternoon off and half of Sunday.

The style of doing business altogether differs from the home style. It is done mostly by order-forms supplied in books by the chemist to his customers. The customer sends his order by his servant, who either waits for the goods or we send them on. This method might be adopted with considerable advantage by home chemists in suburban residential districts. Many orders might thereby be received which under other circumstances would go to the

opposition side or to the stores. Besides, the order-forms can be made a means of advertising the chemist's nostrums, and in the end might come cheaper and even more effective than the much-circulated and little-read handbill on which so many of the fraternity, with more or less success, expend their advertising capital and incennity.

so many of the fraternity, with more or less success, expend their advertising capital and ingenuity.

In the dispensing and drug department those at home would be prone to think that only the common every-day drugs would be in demand, but this is by no means the case, for the very latest drugs and fine chemicals are in every-day use. Up here, away, one might almost say, from civilisation, that there should be a demand for any particular firm's manufacture of drugs seems rather out of place, yet

The Ward Family.

THE portraits here given are those of Mr. Moses Ward and his pharmaceutical relatives, settled in Australia. Mr. Moses Ward, J.P., chemist and dentist, was born at Landkey, near Barnstaple, Devonshire, in 1828, and was apprenticed at the North Devon Infirmary, Barnstaple. After completing his apprenticeship he remained as dispenser and dresser for twelve years, and was at one time a recipient from the townsfolk of an inscribed time-piece and a purse of 100 guineas. Mr. Ward opened a business at Barnstaple, but in 1862 sold out and



Top Row: C. H. Ward, J. W. Ward, G. W. Ward. Bottom Row: J. R. Ward, Moses Ward, G. A. Ward.

the natives seem to have an unbounded faith in Parke, Davis & Co.'s drugs. They ask for P., D. & Co.'s this, that, and the next thing, and will not be put off with any other make. Next, and almost equal in popularity, come Burroughs Wellcome & Co.

We do a lot of business with out-stations, from which there is always a demand for every kind of drug and patent medicine, not excluding quinine pills and sandal-wood oil. This is all done on the C.O.D., or, as it is called here, the V.P.P. (value payable post) system, which is of real advantage in this country, where one has very probably to send three or four hundred miles to get what one wants. Though the V.P.P. is practically essential to India, I should not like to recommend it for home, where large towns are not so far apart, and any local dealer can quickly procure what his customer wants.

THE CANADIAN TRADE AND COMMERCE DEPARTMENT is advised by its agent in South Africa that there are fine chances for soap manufacturers to obtain a good market for their product in Cape Colony. Most of the imports to the Cape are now received from England and Belgium

went to Brisbane. There a successful business career was begun, which is, now that Mr. Ward has retired, carried on by his sons, Mr. J. W. Ward and Mr. G. W. Ward. Mr. C. H. Ward, of Warwick, is Mr. Moses Ward's eldest son. He was for six years dispenser at Brisbane Hospital, and has been for over twenty years in business in Warwick. His assistant is Mr. J. R. Ward, a second cousin. Mr. J. W. Ward, J.P., was born in 1873, and was educated in England and Tasmania. He was apprenticed to his father, and passed his Final at Brisbane in 1897. He was elected a member of the Council of the Pharmaceutical Society of Queensland in 1901, and last August was elected President. Mr. G. W. Ward, his brother and partner, was born in 1876, and was educated at Hobart. He was apprenticed to his father, and passed his Final in 1899. Mr. G. A. Ward, of Waveley, is a nephew of Mr. Moses Ward, and was apprenticed to Mr. C. H. Ward, of Warwick. We take these particulars from "The Chemist and Druggist of Australasia," and should be glad if anyone can give us other instances of large families of pharmacists.

More Minor Experiences.

A Corner for Students' prizeman (136/49) supplies this account of what he did at Galen Place:

account of what he did at Galen Place:

Chemistry was the first subject. I was given (1) a mixture of two carbonates, and told to identify the metals present, then to prepare a pure crystalline specimen of the nitrate of one of them. (2) By means of pure AgNO. I had to find the percentage of HCN in a solution provided. I was not long in finding the two metals. They were lead and sodium. With the remainder of the salt I proceeded to wash away the soluble sodium carbonate by means of hot water. When the filtrate gave no indication of a carbonate, the portion on the filtre was dissolved in dilute nitric acid, evaporated down, and left to crystallise. Whilst the carbonates were being washed I did the estimation of the HCN. This I found to be approximately 2 per cent. In the afternoon I went to dispensing. Mr. Stamp was examiner, and I found him most courteous and obliging. The paper I had was as follows:

... 100 gr. Syr. fer. iodid. ... zj. t.d.s. ex aquâ. Mag. carb. Sodii bicarb. gr. vii. Pulv. rhei Ft. cachet. Mitte vj. Acid. arsenios. ... gr. 1 Ext. nuc. vom. Fer. redact. Ft. pil. parv. Tales xij. Silver. Ung. belladon. ... Nocte utend.

Blister for right ear.

Nocte utend.

Blister for right ear.

I got permission to make the B.P. quantity of ung. belladonnæ. This saved a lot of calculation, and I was able to do all the articles on the paper in the time allowed.

In two or three days I received word to attend the oral examination. My first subject was chemistry. The examiner first asked how I should prepare ammonia gas. Had I ever collected any? "Yes." What method did you employ? "Upward displacement." Could it be collected over mercury? "Yes." Have you ever made prussic acid? "Yes." Ever collected it? "No." Is pure HCN a gas or a liquid? "Gas." Does a solution of it keep well? "No." Why? "Because it is volatile, and is hydrolysed by water." What does it form? "Ammonium formate." Give formula of formic acid and preparation. Why do you say H.COOH and not H.CO.? I told him the two hydrogens are in different states of combination, one being more easily replaced by metals. Which one? "The one in combination with oxygen as hydroxyl." Is C.H.OH acted on by metals? I told him sodium would replace the hydrogen and form C.H.ONA. What other body is formed if water be present? "NaOH." I had next to state Avogadro's hypothesis and mention what important bearing this had on chemistry. Had I ever taken a vapour-density? "Yes." What method did you employ? "Victor Meyer's." Then I had to give a minute description of this method. How is PH, made? This being answered, I was asked if I knew of a similar combination of hydrogen with arsenic. "Yes, AsH." Give its preparation. What happens when a cold vessel is depressed in the flame of burning hydrogen, containing AsH.? "Arsenium is deposited." How is this distinguished from antimony obtained in the same way? "By its ready solubility in solution of chlorinated lime." What happens to the AsH, when no cold dish is depressed in the flame? "Forms H.O and As.O." Why do you say As.O. and not As.O.? I told him, and a few more similar questions finished the examination in chemistry.

In materia medica I had Mr. Marsden for examiner. I was able t

a few others.

On gaining my seat, however, I remembered I had said pelletierine is the active principle of pellitory root, which of course was wrong. I did not have long to meditate over this, as I was soon called to botany with Mr. Potter. This consisted of very few questions. There were two slides to recognise; one was a transverse section of a monocotyledonous stem, the other a section of what I thought was a dicotyledonous water plant with very large cortex. Some questions were asked on cambium. Had I seen dicots. without cam-

bium? I mentioned that this being a water plant which is submerged, there would be no need of any further development of wood, and all the cambium would, at an early stage, be transformed into permanent tissue. I was asked to explain how the air gets into the tissues of submerged plants. What is necessary for the growth of seeds? "Warmth, moisture, and air." What is the air for? "To supply the oxygen for respiration."

My next subject was prescription-reading. I was shown the following and told to comment upon it:

following and told to comment upon it:

Acid. arsenios. ... Hyd. iodid. rub. gr. ij. ... gr. xx. Make into 100 pills.

Another prescription was shown, in which 10 minims of liq. trinitrin. were ordered for a dose. This had to be noted. Then followed a prescription in English which had to be translated into full Latin. The directions were "The gargle. To be used three times a day, as directed." After reading four or five autograph prescriptions, which were fairly well written, and checking a few more over-doses, I was requested to go and sit down.

written, and checking a few more over-doses, I was requested to go and sit down.

My last subject was pharmacy. The examiner's first question, "What is a water-bath?" set me at ease. I had then to recognise pil. rhei co. in mass, and give its composition. How is ext. belladon. liq. made? I was next asked the strengths of the tincture and liquid extract of opium, and nearly all the preparations of belladonna. Name the official soaps. What is hard soap chemically? Curd soap? Soft soap? What precautions would you take in selling laudanum? What extra precautions in selling poisons in Part I. of the Schedule? Give preparation of ung. zinci oleatis. A few more questions of a similar nature finished this subject. Two or three minutes' rest on the form, then followed the usual presidential congratulations and handshaking.

Gazette.

The Bankruptcy Acts, 1883 and 1890.

RECEIVING ORDER.

Crocker, George, Chryssell Road, Brixton, S.W., chemist.

ADJUDICATION.

Marks, John, Houndsditch, E.C., sponge importer.

Where to Study.

THE FOLLOWING EDUCATIONAL INSTITUTIONS are advertising in this issue:

South London School of Pharmacy, 325 Kennington Road. S.E.

S.E.
Westminster College of Chemistry, Trinity Square,
Borough, S.E.
Metropolitan College of Pharmacy, 160 and 162 Kennington Park Road, S.E.
London College of Chemistry, 323 Clapham Road, S.W.
Liverpool School of Pharmacy, 6 Sandon Terrace, Upper
Duke Street, Liverpool.
Royal Dispensary, 21 West Richmond Street, Edinburgh.

A CURE FOR SULKS.—While attending to my shop to-day, I had a somewhat singular experience. A man and a boy (his son), a lad about twelve or thirteen years of age, entered the shop, and the father said, "I want you to give this boy a dose of castor oil." I at once proceeded to do so, by handing the lad half-a-dozen triple mints, and telling him to put three in his mouth. I then washed out a 2-oz. glass measure with water, and measured out I oz. of the oil, and brought it to them. It is said that one man man nim to put three in his mouth. I then washed out a 2-0z, glass measure with water, and measured out 1 oz, of the oil, and brought it to them. It is said that one man may lead a horse to the well, but that it takes ten men to make the horse drink. I now found that the boy was crying: he did not want castor oil, and positively refused to take it; whereupon the father asked me to pour the oil down the boy's throat, while he would hold his hands. This I objected to do. I had supplied the oil, but he must administer it; so the father caught the lad, and in the struggle the boy fell or was pushed down on the floor. The father now lifted the glass measure containing the oil, and held it to the boy's mouth, but, judging from the length of time the operation took, and the quantity of oil which went over his face, I question if he swallowed any of it. However, he had been taught a lesson which he will probably remember long after the effects of a good thrashing would have died away. It turned out that the boy had been indulging in a game of sulks, and had refused to take his dinner. Hence the "Castor Oil Punishment" was administered (185/47).

Exchange Column—Bargains.

TERMS.

One halfpenny per word with name and address. One panny per word if we register the address and attach a number.

No Advertisement inserted for less than 6d.

Limited to the Advertisements of Surplus Stock, not of a Wholesale Character, of Shop Fittings (secondhand), Apparatus, Paotographic Goods, Books and Periodicals, Formulæ, Addresses Wanted, and Articles Wanted.

DEPOSIT.—The purchaser of anything advertised in the Exchange Column may remit the amount to us, and we only pay the money deposited on advice from the remitter. We charge a commission of 6d. on any transaction of £3 or less, and 1s. if above that amount, which is payable by the purchaser.

Remittances payable to EDWARD HALSE, and crossed MARTIN'S BANK, LIMITED.

FOR DISPOSAL.

APPARATUS.

Water-still.—One Morris & Wethered's No. 23 automatic still for sale, fitted for gas, complete, with connections. Price and particulars from GILBERT BOWS, Ironmonger, Worthing.

BOOKS AND PERIODICALS.

29 vols. "Year-book of Pharmacy," 1870-1899. GRIFFIN, Weybridge.

OPTICAL AND PHOTOGRAPHIC.

- Kodak daylight developing-machine, in case, style A, nnused; accept first reasonable offer. Jones, Chemist, St. Asaph.
- 18 Ilford's ‡-plates, ordinary; 14 rolls [Ilford's p.o.p. mauve and pink; 9 packets Ilford's ½-plate p.o.p. pink; 6 packets Ilford's cabinet p.o.p. pink; 3 Ilford's plates 12 × 10 special rapid; at half retail prices to clear; carriage forward. FLETCHER, Eckington, near Sheffield.
- Photographic Formulæ; an absolutely perfect single solution developer, makes lovely negatives; no failures; keeps indefinitely; also unequalled toner and fixer; beautiful permanent rich tones, simple, efficacious; print showing tone, 2 stamps "H.," Colnetten, Southwich, Sussex.

PROPRIETARY ARTICLES.

- 10 Mennen's borated talcum powder for 6s. 6d. 115/40, Office of this Paper.
- Daisy powders, 11 dozen at 8s., carriage paid; whole or part. "CHEMIST," 68 Parade, Leamington.

SHARES.

Shares for Sale .- See p. 60.

SHOP FITTINGS.

- Range of 48 drug drawers, glass labels, bottle lockers under; good counter, with usual drawers; 2 4-gallon carboys, 1 2-gallon ditto, stands with each; 1 fixture of 6 large drawers and 2 spacious cupboards, bottle lockers under. "Chemicus," 10 Bridge Street, St. Helens.
- 8-ft. counter, plate-glass front, 4 mahogany doors: also 7-ft glass counter cases, mahogany, velvet-lined trays, with sloping back and cash opening; £8 the 2, or will sell separately; a Brein check-till, 35s., half cost; 220 assorted shop-rounds, new 18 months ago (white and gold shield labels), £8 10s.; cost double. Address, "C. O. E.," 147 Fore Street, Edmonton.

MISCELLANEOUS.

- Vulcaniser for sale; good condition; price 30s. Apply, 102/30, Office of this Paper.
- Wills's latest guinea Materia Medica cabinet; what offers? Mawson, 14 Comely Bank, Edinburgh.
- Overstocked.—20 'gross 'Butterfly ffly-catchers, '5s. '6d. per gross to clear. Wm. CROMPTON, 162 Bolton Street, Bury, Lancs.

MISCELLANEOUS—continued.

- Soda-water machine, Barnett & Foster No. 2, compact, with syrup pump complete, nearly new, £35. Balley, Chemist, Matlock Bank.
- Materia Medic a cabinet (Southall's), £2 15s.; D. Collection, new and complete, used once, 35s. J. O. BARRACLOUGH, Orchard Street, Falkirk, N.B.
- Cocaine hydrochlor., pure, 14s. oz., post-paid any quantity: 2-dram tin boxes, plain, 1s. 1d., 20 gross carriage paid, sample one stamp-Hartle, Chemist, Hanley.
- Microscope, second-hand, very powerful, 50s.; analysis balance in glass case, drawer under, with weights and details, 25s.; exhaust-pump with bell-glass, 15s.; Bunsen burner with hand-bellows, 12s. 6d. 40/17, Office of this Paper.
- Syphon-stand, marble top, real Spanish mahogany, 90s., new, handsome fixture, for good glass business; portable photographic studio, with backgrounds. Offers (sale or exchange for anything useful) to JONES, Chemist, Portmadoc.
- Printing-press, metal type, accessories, 10s.; prints cards, memos, billheads, circulars, labels, picture-postcards, &c. Particulars from Webster, Leonard Street, Derby.
- A magnificent double American soda-fountain, by John Matthews, of New York, with patent Nimbos tumbler-washer, tumbler-holders, &c., complete in every detail; beautiful marble slab, 12½ feet long; this is one of the finest installations in the kingdom; will be sold a bargain. Apply to W. A. LYNASS, Chemist, Belfast.
- 12 2s. 6d. Ferroleum; 8 doz. 6d. check bathing caps, new; 4 1s. 6d. Marmite bouillon; 6 4-oz. Marmite extract; 12 2-oz. Marmite extract; 1 2s. 6d. Post's C.B.Q. tabs.; 6 1s. 1½d. Vogeler's curative comp.; 1 1s. 1½d. Cavanias' pills; 1 1s. 1½d. Cavanias' ointment; 7 lbs. sodæ nitris. 115/16, Office of this Paper.

WANTED.

- Old artificial teeth bought; cash by return post. DENT, 3 Hinckley Road Leicester.
- Tincture-press, percolator, iron mortar, chest-protectors. "Lex," Office of this Paper.
- Wall-case (mahogany), 7 ft. long, 3 ft. high × 10 in. deep. Brown, North Street, Belfast.
- Minor books, Chemists' books. Send, prepaid for valuation, Gower, Bookseller, Waterloo, Liverpool.
- At once, a pair of carboys, 2 gallons, pear-shape or swan; lowest price; second band. Seedhouse, Newmarket.
- Very cheap shop drawers; about 14 ft.; good condition; labelled. GREEN, 121 Godwin Road, Forest Gate, E.
- Perkin and Kipping's "Organic," B.P., Southall's "Organic," "Mat. Med.," Lowson's "Botany;" recent editions. State price, MARTIN, 5 Adelaide Terrace, Albert Road, Bournemouth.

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